

CHEMICALS UNLIMITED



penta^o

Product Catalogue

The background of the image is a dark gray color. Overlaid on this background is a complex, abstract pattern of thin, light gray lines. These lines form a series of overlapping circles or ellipses that create a sense of depth and movement, resembling a stylized wave or a series of concentric ripples. The pattern is most prominent in the lower half of the image, where it appears to flow from the bottom left towards the right.

Laboratory Chemicals

A

Acetaldehyde

Chemical formula:	CH ₃ CHO
Relative molecular weight:	44,05
CAS:	75-07-0
EINECS:	200-836-8

A.G. (10020)

Appearance	clear colourless liquid
Assay	min. 99,5 %
Residue after evaporation	max. 0,002 %
Free acids (as CH ₃ COOH)	max. 0,5 %
Fe (Iron)	max. 0,00002 %
Pb (Lead)	max. 0,00001 %
Density (20 °C)	0,780 g/cm ³
Flash point	-27 °C

pure (10010)

Appearance	clear colourless liquid
Assay	min. 99,0 %
Density (20 °C)	0,780 g/cm ³
Refractive index	1,333
Flash point	-27 °C

Hazard Statements:	224, 319, 335, 341, 350, 412
EUH Statements:	
Precautionary Statements:	201, 210, 233, 280, 308+313, 403+235
Signal Word:	Danger
ADR/RID:	UN 1089 3 /F1 /I



Acetamide

Chemical formula:	CH ₃ CONH ₂
Relative molecular weight:	59,07
CAS:	60-35-5
EINECS:	200-473-5

pure (10030)

Appearance	white crystalline substance
Assay	min. 99,0 %
Melting point	79 - 81 °C

Hazard Statements:	351
EUH Statements:	
Precautionary Statements:	281, 308+313
Signal Word:	Warning
ADR/RID:	UN 3077 9 /M7 /III



Acetic acid 99%

Chemical formula:	CH ₃ COOH
Relative molecular weight:	60,05
CAS:	64-19-7
EINECS:	200-580-7

A.G. (20000)

Appearance	clear colourless liquid
Assay	min. 99,0 %
Residue after evaporation	max. 0,002 %
Chloride (Cl ⁻)	max. 0,0002 %
Sulfate (SO ₄ ²⁻)	max. 0,0002 %
Fe (Iron)	max. 0,0001 %
Heavy metals (as Pb)	max. 0,0001 %
Density (20 °C)	1,050 g/cm ³
Flash point	40 °C

pure (19970)

Appearance	clear colourless liquid
Assay	min. 99,0 %
Flash point	40 °C

tested acc. to Ph. Eur. (37700)

Appearance	clear colourless liquid
Assay	99,0 - 100,5 %
Residue after evaporation	max. 0,01 %
Chloride (Cl ⁻)	max. 0,0025 %
Sulfate (SO ₄ ²⁻)	max. 0,005 %
Fe (Iron)	max. 0,0005 %
Heavy metals (as Pb)	max. 0,0005 %
Freezing point	> 14,8 °C
Flash point	40 °C

Hazard Statements:	226, 314
EUH Statements:	
Precautionary Statements:	260, 280, 305+351+338, 301+330+331, 310
Signal Word:	Danger
ADR/RID:	UN 2789 8 /CF1 /II



Acetic acid 99,8%

Chemical formula:	CH ₃ COOH
Relative molecular weight:	60,05
CAS:	64-19-7
EINECS:	200-580-7

A.G. (19990)

Appearance	clear colourless liquid
Assay	min. 99,8 %
Water	max. 0,15 %
Residue after evaporation	max. 0,003 %
Aldehyde	max. 0,005 %
Substances reducing KMnO ₄ (as HCOOH)	max. 0,05 %
Chloride (Cl ⁻)	max. 0,0001 %
Sulfate (SO ₄ ²⁻)	max. 0,0001 %
Fe (Iron)	max. 0,00005 %
Heavy metals (as Pb)	max. 0,00005 %
Flash point	40 °C

ACS (41130)

Appearance	clear colourless liquid
Assay	min. 99,7 %
Color scale (APHA)	max. 10
Solubility	passes test
Residue after evaporation	max. 0,001 %
Acetic anhydride	max. 0,01 %
Chloride (Cl ⁻)	max. 1 ppm
Sulfate (SO ₄ ²⁻)	max. 1 ppm
Heavy metals (as Pb)	max. 0,5 ppm
Fe (Iron)	max. 0,2 ppm
Substances reducing K ₂ Cr ₂ O ₇	passes test
Substances reducing KMnO ₄	passes test
Free alkali	max. 0,0004 meq/g

Hazard Statements:	226, 314
EUH Statements:	
Precautionary Statements:	260, 280, 305+351+338, 301+330+331, 310
Signal Word:	Danger
ADR/RID:	UN 2789 8 /CF1 /II



Acetic anhydride

Chemical formula:	(CH ₃ CO) ₂ O
Relative molecular weight:	102,09
CAS:	108-24-7
EINECS:	203-564-8

A.G. (10440)

Appearance	clear colourless liquid
Assay	min. 99,0 %
Residue after evaporation	max. 0,005 %
Density (20 °C)	1,08 g/cm ³
Chloride (Cl ⁻)	max. 0,001 %
Sulfate (SO ₄ ²⁻)	max. 0,0005 %
Heavy metals (as Pb)	max. 0,0005 %
Fe (Iron)	max. 0,0005 %
Flash point	49 °C

pure (10430)

Appearance	clear colourless liquid
Assay	min. 98,0 %
Density (20 °C)	1,08 g/cm ³
Refractive index	1,390
Flash point	49 °C
Hazard Statements:	226, 330, 302, 314, 335
EUH Statements:	071
Precautionary Statements:	280, 303+361+353, 304+340, 305+351+338

Signal Word:	Danger
ADR/RID:	UN 1715 8 /CF1 /II



Acetone

Chemical formula:	CH ₃ COCH ₃
Relative molecular weight:	58,08
CAS:	67-64-1
EINECS:	200-662-2

A.G. (10060)

Appearance	clear colourless liquid
Assay	min. 99,5 %
Density (20 °C)	0,7890 - 0,7924 g/cm ³
Residue after evaporation	max. 0,001 %
Water	max. 0,3 %
Acidity (as CH ₃ COOH)	max. 0,003 %
Boiling point	55,5 - 56,5 °C
Color scale (APHA)	max. 10
Flash point	-19 °C

pure (10050)

Appearance	clear colourless liquid
Assay	min. 99,0 %
Density (20 °C)	0,790 - 0,792 g/cm ³
Residue after evaporation	max. 0,002 %
Water	max. 0,5 %
Acidity (as CH ₃ COOH)	max. 0,003 %
Flash point	-19 °C

ACS (10040)

Appearance	clear colourless liquid
Assay	min. 99,5 %
Color scale (APHA)	max. 10
Residue after evaporation	max. 0,001 %
Solubility	passes test
Free acids	max. 0,0003 meq/g
Free alkali	max. 0,0006 meq/g
Aldehyde (as HCHO)	max. 0,002 %
Isopropyl alcohol	max. 0,05 %
Methanol	max. 0,05 %
Substances reducing KMnO ₄	passes test
Water	max. 0,5 %
Density (20 °C)	0,791 g/cm ³
Refractive index	1,359

A

for UV (10090)

Appearance	clear colourless liquid
Assay	min. 99,5 %
Residue after evaporation	max. 0,001 %
Water	max. 0,5 %
Free acids	max. 0,0003 meq/g
Free alkali	max. 0,0006 meq/g
Acetaldehyde	max. 0,002 %
Isopropyl alcohol	max. 0,05 %
Methanol	max. 0,05 %
Color scale (APHA)	max. 10
Density (20 °C)	0,791 g/cm ³
Refractive index	1,359
Substances reducing KMnO ₄	passes test
Infrared spectrometry	passes test
UV absorption at 330 nm	max. 1,00
UV absorption at 340 nm	max. 0,10
UV absorption at 350 nm	max. 0,02
UV absorption at 400 nm	max. 0,01

for HPLC (10080)

Appearance	clear colourless liquid
Assay	min. 99,8 %
Residue after evaporation	max. 0,0002 %
Water	max. 0,5 %
Free acids	max. 0,0003 meq/g
Free alkali	max. 0,0006 meq/g
UV absorption at 330 nm	max. 1,00
UV absorption at 340 nm	max. 0,10
UV absorption at 350 nm	max. 0,02
UV absorption at 400 nm	max. 0,01

Hazard Statements:	225, 319, 336
EUH Statements:	
Precautionary Statements:	210, 261, 305+351+338
Signal Word:	Danger
ADR/RID:	UN 1090 3 /F1 /II



Acetonitrile

Chemical formula:	CH ₃ CN
Relative molecular weight:	41,05
CAS:	75-05-8
EINECS:	200-835-2

A.G. (10140)

Appearance	clear colourless liquid
Assay	min. 99,5 %
Residue after evaporation	max. 0,001 %
Water	max. 0,1 %
Free acids	max. 0,002 %
Pb (Lead)	max. 0,00001 %
Fe (Iron)	max. 0,00005 %
Density (20 °C)	0,782 g/cm ³
Refractive index	1,344
Flash point	2 °C

pure (10120)

Appearance	clear colourless liquid
Assay	min. 98,0 %
Density (20 °C)	0,780 g/cm ³
Refractive index	1,344
Flash point	2 °C

for HPLC (10160)

Appearance	clear colourless liquid
Assay	min. 99,8 %
Residue after evaporation	max. 0,0005 %
Water	max. 0,03 %
UV absorption at 195 nm	max. 0,301
UV absorption at 200 nm	max. 0,097
UV absorption at 215 nm	max. 0,046
UV absorption at 230 nm	max. 0,009

Hazard Statements:	225, 319, 302, 312, 332
EUH Statements:	
Precautionary Statements:	210, 280, 305+351+338
Signal Word:	Danger
ADR/RID:	UN 1648 3 /F1 /II



Acetylacetone

Chemical formula:	CH ₃ COCH ₂ COCH ₃
Relative molecular weight:	100,12
CAS:	123-54-6
EINECS:	204-634-0

A.G. (10170)

Appearance	clear colourless liquid
Assay	min. 99,5 %
Ethyl acetate	max. 0,01 %
Density (20 °C)	0,972 g/cm ³
Fe (Iron)	max. 0,00001 %
Pb (Lead)	max. 0,00001 %
Ca (Calcium)	max. 0,00005 %
Flash point	38 °C

pure (31520)

Appearance	clear colourless liquid
Assay	min. 98,0 %
Density (20 °C)	0,972 g/cm ³
Refractive index	1,452
Flash point	38 °C

Hazard Statements:	226, 302, 311, 331, 412
EUH Statements:	
Precautionary Statements:	210, 261, 280, 311, 304+340
Signal Word:	Danger
ADR/RID:	UN 2310 3 /FT1 /III



Acetylchloride

Chemical formula:	CH ₃ COCl
Relative molecular weight:	78,5
CAS:	75-36-5
EINECS:	200-865-6

A.G. (30880)

Appearance	clear, colorless to yellowish liquid
Assay	min. 99,0 %
Density (20 °C)	1,105 g/cm ³
Refractive index	1,389
Boiling point	50 - 52 °C

pure (10180)

Appearance	clear, colorless to yellowish liquid
Assay	min. 98,0%
Density (20 °C)	1,105 g/cm ³
Refractive index	1,389
Flash point	49 - 54 °C

Hazard Statements:	225, 314
EUH Statements:	014, 071
Precautionary Statements:	210, 305+351+338, 280, 310
Signal Word:	Danger
ADR/RID:	UN 1717 3 /FC /II



Acrylic acid

Chemical formula:	CH ₂ CHCOOH
Relative molecular weight:	72,06
CAS:	79-10-7
EINECS:	201-177-9

pure (18570)

Appearance	clear colorless liquid
Assay	min. 98,0 %
Water	max. 0,2 %
Melting point	12 - 15 °C
Density (20 °C)	1,050 g/cm ³
Refractive index	1,421
Flash point	46 °C
Stabilizer	hydrochinon monomethyleter ~ 0,02%

Hazard Statements:	226, 332, 312, 302, 314, 335, 400, 412
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EUH Statements:	
Precautionary Statements:	210, 273, 280, 301+330+331, 302+352, 305+351+338, 310

Signal Word:	Danger
ADR/RID:	UN 2218 8 /CF1 /II



Activated charcoal granulated

Chemical formula:	C
Relative molecular weight:	12,01
CAS:	7440-44-0
EINECS:	231-153-3

See below (10210)

Appearance	black granules
Adsorption	passes test
Loss on drying	max. 5,0 %

A

Activated charcoal powder

Chemical formula:	C
Relative molecular weight:	12,01
CAS:	7440-44-0
EINECS:	231-153-3

A.G. (10230)

Appearance	black powder
Adsorption capacity (dried material)	min. 35 g of phenazone / 100 g

Adipic acid

Chemical formula:	HOOC(CH ₂) ₄ COOH
Relative molecular weight:	146,14
CAS:	124-04-9
EINECS:	204-673-3

A.G. (18560)

Appearance	white crystalline substance
Assay	min. 99,0 %
Sulphated ash	max. 0,1 %
Melting point	151 - 154 °C

pure (18550)

Appearance	white crystalline substance
Assay	min. 98,0 %
Sulphated ash	max. 0,2 %
Melting point	150 - 154 °C

Hazard Statements:	319, 412
EUH Statements:	
Precautionary Statements:	280, 305+351+338
Signal Word:	Warning
ADR/RID:	



Aluminium chloride anhydrous

Chemical formula:	AlCl ₃
Relative molecular weight:	133,34
CAS:	7446-70-0
EINECS:	231-208-1

A.G. (16270)

Appearance	yellowish powder
Assay	min. 99,0 %
Fe (Iron)	max. 0,001 %
Heavy metals (as Pb)	max. 0,001 %

pure (16260)

Appearance	yellowish powder
Assay	min. 98,0 %
Fe (Iron)	max. 0,005 %
Heavy metals (as Pb)	max. 0,005 %

Hazard Statements:	314
EUH Statements:	014
Precautionary Statements:	280, 305+351+338, 310
Signal Word:	Danger
ADR/RID:	UN 1726 8 /C2 /II



Aluminium chloride hexahydrate

Chemical formula:	AlCl ₃ · 6 H ₂ O
Relative molecular weight:	241,43
CAS:	7784-13-6
EINECS:	231-208-1

pure (16280)

Appearance	white crystalline substance
Assay	min. 98,0 %
pH (5% water solution)	2,5 - 3,6
Water	42 - 48 %

Hazard Statements:	314
EUH Statements:	
Precautionary Statements:	280, 305+351+338, 310
Signal Word:	Danger
ADR/RID:	



Aluminium nitrate nonahydrate

Chemical formula:	Al(NO ₃) ₃ · 9 H ₂ O
Relative molecular weight:	375,13
CAS:	7784-27-2
EINECS:	236-751-8

A.G. (13000)

Appearance	white crystalline substance
Assay	min. 98,0%
pH (5% water solution, 20 °C)	2,0 - 4,0
Chloride (Cl ⁻)	max. 0,005 %
Sulfate (SO ₄ ²⁻)	max. 0,005 %
Fe (Iron)	max. 0,005 %
Heavy metals (as Pb)	max. 0,005 %

Hazard Statements:	318
EUH Statements:	
Precautionary Statements:	280, 305+351+338, 310
Signal Word:	Danger
ADR/RID:	UN 1438 5.1 /O2 /III



Aluminium oxide

Chemical formula:	Al ₂ O ₃
Relative molecular weight:	101,96
CAS:	1344-28-1
EINECS:	215-691-6

A.G. (23160)

Appearance	white powder
Assay (on ignition subst.)	min. 98,5 %
Loss on ignition (1000°C)	max. 1,0 %
Fe (Iron)	max. 0,3 %

pure (23140)

Appearance	white powder
Assay (on ignition subst.)	min. 98,0 %
Loss on ignition (1000°C)	max. 2,0 %

Hazard Statements:	
EUH Statements:	
Precautionary Statements:	260, 262
Signal Word:	Danger
ADR/RID:	

A

Aluminium potassium sulfate dodecahydrate

Chemical formula:	$\text{KAl}(\text{SO}_4)_2 \cdot 12 \text{H}_2\text{O}$
Relative molecular weight:	474,39
CAS:	7784-24-9
EINECS:	233-141-3

[A.G. \(25380\)](#)

Appearance	white crystalline substance
Assay	min. 99,0 %
Chloride (Cl^-)	max. 0,001 %
Fe (Iron)	max. 0,0005 %
Heavy metals (as Pb)	max. 0,001 %
Ammonium (NH_4^+)	max. 0,005 %
pH (5% water solution)	3,0 - 3,5

[pure \(25370\)](#)

Appearance	white crystalline substance
Assay	min. 99,0 %

Aluminium powder

Chemical formula:	Al
Relative molecular weight:	26,98
CAS:	7429-90-5
EINECS:	231-072-3

[pure \(14830\)](#)

Appearance	grey powder
Assay	min. 93,0 %
Fe (Iron)	max. 0,5 %
Cu (Copper)	max. 0,01 %
Pb (Lead)	max. 0,01 %
Hazard Statements:	261, 250
EUH Statements:	
Precautionary Statements:	222, 370+378
Signal Word:	Danger
ADR/RID:	UN 1396 4.3 /W2 /II



Aluminum sulfate hydrate

Chemical formula:	$\text{Al}_2(\text{SO}_4)_3 \cdot x \text{H}_2\text{O}$
Relative molecular weight:	342,15
CAS:	17927-65-0
EINECS:	233-135-0

[pure \(25430\)](#)

Appearance	white or yellowish powder (granules)
Assay (Al)	7,9 - 9,4 %
Hazard Statements:	318
EUH Statements:	
Precautionary Statements:	280, 305+351+338
Signal Word:	Danger
ADR/RID:	



Aluminum sulfate octadecahydrate

Chemical formula: $\text{Al}_2(\text{SO}_4)_3 \cdot 18 \text{H}_2\text{O}$
 Relative molecular weight: 666,41
 CAS: 7784-31-8
 EINECS:

A.G. (25450)

Appearance: white powder
 Assay: min. 99,9 %
 pH (2% water solution): 2,5 - 4,0
 Chloride (Cl^-): max. 0,005 %
 Fe (Iron): max. 0,005 %
 Heavy metals (as Pb): max. 0,005 %

Hazard Statements: 318
 EUH Statements:
 Precautionary Statements: 280, 305+351+338
 Signal Word: Danger
 ADR/RID:



Amidosulfonic acid

Chemical formula: $\text{NH}_2\text{SO}_3\text{H}$
 Relative molecular weight: 97,09
 CAS: 5329-14-6
 EINECS: 226-218-8

A.G. (18610)

Appearance: white crystalline substance
 Assay: min. 99,5 %
 Sulphated ash: max. 0,01 %
 Chloride (Cl^-): max. 0,005 %
 Sulfate (SO_4^{2-}): max. 0,02 %
 Fe (Iron): max. 0,005 %
 Heavy metals (as Pb): max. 0,005 %

pure (18600)

Appearance: white crystalline substance
 Assay: min. 99,0 %
 Sulphated ash: max. 0,1 %

Hazard Statements: 315, 319, 412
 EUH Statements:
 Precautionary Statements: 273, 305+351+338
 Signal Word: Warning
 ADR/RID: UN 2967 8 /C2 /III



4-Aminoantipyrine

Chemical formula: $\text{C}_{11}\text{H}_{13}\text{N}_3\text{O}$
 Relative molecular weight: 203,25
 CAS: 83-07-8
 EINECS: 201-452-3

A.G. (29380)

Appearance: yellow crystalline powder
 Assay: min. 98,0 %
 Melting point: 105 - 110 °C
 Residue on ignition: max. 0,1 %

pure (29370)

Appearance: yellow crystalline powder
 Assay: min. 98,0 %
 Melting point: 105 - 110 °C

for spectrophotometry (33310)

Appearance: yellow crystalline powder
 Assay: min. 98,0 %

Hazard Statements: 302, 319, 315, 335
 EUH Statements:
 Precautionary Statements: 261, 305+351+338
 Signal Word: Warning
 ADR/RID:



A

6-Aminocaproic acid

Chemical formula:	$\text{NH}_2(\text{CH}_2)_5\text{COOH}$
Relative molecular weight:	131,18
CAS:	60-32-2
EINECS:	200-469-3

pure (18520)

Appearance	white crystalline substance
Assay	~ 99,0 %
Melting point	207 - 209 °C

Hazard Statements:	315, 319, 335
EUH Statements:	
Precautionary Statements:	261, 305+351+338
Signal Word:	Warning
ADR/RID:	



Ammonium acetate

Chemical formula:	$\text{CH}_3\text{COONH}_4$
Relative molecular weight:	77,08
CAS:	631-61-8
EINECS:	211-162-9

A.G. (22570)

Appearance	white crystalline substance
Assay (dried substance)	min. 98,0 %
Sulphated ash	max. 0,01 %
Water	max. 2,0 %
pH (5% water solution, 25 °C)	6,5 - 7,5
Chloride (Cl^-)	max. 0,0005 %
Sulfate (SO_4^{2-})	max. 0,001 %

pure (22560)

Appearance	white crystalline substance
Assay	min. 97,0 %
Sulphated ash	max. 0,02 %
pH (5% water solution, 25 °C)	6,5 - 7,5
Chloride (Cl^-)	max. 0,001 %
Sulfate (SO_4^{2-})	max. 0,005 %

Ammonium aluminum sulfate dodecahydrate

Chemical formula:	$\text{NH}_4\text{Al}(\text{SO}_4)_2 \cdot 12 \text{H}_2\text{O}$
Relative molecular weight:	453,33
CAS:	7784-26-1
EINECS:	232-055-3

A.G. (25360)

Appearance	white crystalline substance
Assay	min. 99,0 %
Chloride (Cl^-)	max. 0,005 %
Fe (Iron)	max. 0,005 %
Heavy metals (as Pb)	max. 0,005 %
pH (0,1M water solution, 25 °C)	3,0 - 4,5

pure (25350)

Appearance	white crystalline substance
Assay	min. 99,0 %

Ammonium bromide

Chemical formula:	NH ₄ Br
Relative molecular weight:	97,95
CAS:	12124-97-9
EINECS:	235-183-8

A.G. (11130)

Appearance	white crystalline substance
Assay	min. 99,0 %
pH (5% water solution, 20 °C)	5,0 - 6,5
Chloride (Cl ⁻)	max. 0,1 %
Sulfate (SO ₄ ²⁻)	max. 0,005 %
Fe (Iron)	max. 0,005 %
Pb (Lead)	max. 0,005 %

pure (11120)

Appearance	white crystalline substance
Assay	min. 99,0 %

Ammonium carbonate

Chemical formula:	(NH ₄) ₂ CO ₃
Relative molecular weight:	96,1
CAS:	10361-29-2
EINECS:	233-786-0

A.G. (27760)

Appearance	white crystalline substance
Assay (NH ₃)	30,0 - 33,0 %
Total S (as SO ₄ ²⁻)	max. 0,005 %
Chloride (Cl ⁻)	max. 0,005 %
Fe (Iron)	max. 0,001 %
Heavy metals (as Pb)	max. 0,001 %

pure (27750)

Appearance	white crystalline substance
Assay (NH ₃)	min. 27,0 %

Hazard Statements:	302
EUH Statements:	
Precautionary Statements:	
Signal Word:	Warning
ADR/RID:	



Ammonium dihydrogenphosphate

Chemical formula:	(NH ₄)H ₂ PO ₄
Relative molecular weight:	115,03
CAS:	7722-76-1
EINECS:	231-764-5

A.G. (12280)

Appearance	white crystalline substance
Assay	min. 99,0 %
Chloride (Cl ⁻)	max. 0,005 %
Sulfate (SO ₄ ²⁻)	max. 0,01 %
Fe (Iron)	max. 0,002 %
Heavy metals (as Pb)	max. 0,002 %
pH (5% water solution)	4,0 - 5,0
Appearance of solution (10% in water)	clear, colourless

pure (12270)

Appearance	white crystalline substance
Assay	min. 99,0 %
Chloride (Cl ⁻)	max. 0,005 %
Sulfate (SO ₄ ²⁻)	max. 0,02 %
Fe (Iron)	max. 0,005 %
Heavy metals (as Pb)	max. 0,005 %
pH (5% water solution)	4,0 - 5,0

A

Ammonium dichromate

Chemical formula:	(NH ₄) ₂ Cr ₂ O ₇
Relative molecular weight:	252,07
CAS:	7789-09-5
EINECS:	232-143-1

A.G. (12460)

Appearance	orange crystalline substance
Assay	min. 99,0 %
pH (5% water solution, 20 °C)	3,0 - 4,0
Sulfate (SO ₄ ²⁻)	max. 0,02 %
Chloride (Cl ⁻)	max. 0,02 %
Fe (Iron)	max. 0,005 %
Pb (Lead)	max. 0,005 %
Loss on drying (105°C)	max. 1,0 %

pure (12450)

Appearance	orange crystalline substance
Assay	min. 97,0 %
pH (5% water solution, 20 °C)	3,0 - 4,0
Sulfate (SO ₄ ²⁻)	max. 0,05 %
Chloride (Cl ⁻)	max. 0,02 %
Fe (Iron)	max. 0,005 %
Pb (Lead)	max. 0,005 %
Loss on drying (105°C)	max. 3,0 %
Hazard Statements:	272, 350, 340, 360FD, 330, 301, 312, 372, 314, 334, 317, 410

EUH Statements:

Precautionary Statements:

Signal Word:

ADR/RID: UN 1439 5.1 /O2 /II



Ammonium fluoride

Chemical formula:	NH ₄ F
Relative molecular weight:	37,04
CAS:	12125-01-8
EINECS:	235-185-9

A.G. (13990)

Appearance	white crystalline substance
Assay	min. 98,0 %
Sulphated ash	max. 0,02 %
Chloride (Cl ⁻)	max. 0,001 %
Sulfate (SO ₄ ²⁻)	max. 0,01 %
Fe (Iron)	max. 0,005 %
Heavy metals (as Pb)	max. 0,005 %
Ammonium hydrogen difluoride	max. 1,0 %

pure (13980)

Appearance	white crystalline substance
Assay	min. 97,0 %
Hazard Statements:	331, 311, 301
EUH Statements:	
Precautionary Statements:	280, 261, 311
Signal Word:	Danger
ADR/RID:	UN 2505 6.1 /T5 /III



Ammonium formate

Chemical formula:	HCOONH ₄
Relative molecular weight:	63,06
CAS:	540-69-2
EINECS:	208-753-9

A.G. (21840)

Appearance	colourless crystals
Assay	min. 99,0 %
Chloride (Cl ⁻)	max. 0,001 %
Sulfate (SO ₄ ²⁻)	max. 0,002 %
Fe (Iron)	max. 0,0005 %
Pb (Lead)	max. 0,005 %
pH (5% water solution, 25 °C)	5,5 - 7,5

pure (21830)

Appearance	colourless crystals
Assay	min. 97,0 %
Chloride (Cl ⁻)	max. 0,005 %
Sulfate (SO ₄ ²⁻)	max. 0,002 %
Fe (Iron)	max. 0,005 %

Hazard Statements:	315, 319, 335
EUH Statements:	
Precautionary Statements:	261, 305+351+338
Signal Word:	Warning
ADR/RID:	



Ammonium hydrogencarbonate

Chemical formula:	NH ₄ HCO ₃
Relative molecular weight:	79,06
CAS:	1066-33-7
EINECS:	231-911-5

A.G. (12570)

Appearance	white crystalline substance
Assay	min. 99,0 %
Chloride (Cl ⁻)	max. 0,005 %
Sulfate (SO ₄ ²⁻)	max. 0,005 %
Fe (Iron)	max. 0,005 %
Heavy metals (as Pb)	max. 0,005 %

pure (15260)

Appearance	white crystalline substance
Assay	min. 99,0 %

Hazard Statements:	302
EUH Statements:	
Precautionary Statements:	
Signal Word:	Warning
ADR/RID:	



Ammonium hydrogencitrate anhydrous

Chemical formula:	(NH ₄) ₂ C ₆ H ₅ O ₇
Relative molecular weight:	226,19
CAS:	3012-65-5
EINECS:	221-146-3

A.G. (15000)

Appearance	white crystalline substance
Assay	min. 99,0 %
Insoluble matter in water	max. 0,005 %
Sulphated ash	max. 0,01 %
Chloride (Cl ⁻)	max. 0,002 %
Sulfate (SO ₄ ²⁻)	max. 0,005 %
Ca (Calcium)	max. 0,01 %

pure (31230)

Appearance	white crystalline substance
Assay	min. 98,0 %
Insoluble matter in water	max. 0,01 %
Sulphated ash	max. 0,05 %
Chloride (Cl ⁻)	max. 0,005 %
Sulfate (SO ₄ ²⁻)	max. 0,01 %
Ca (Calcium)	max. 0,01 %

Hazard Statements:	319, 335
EUH Statements:	
Precautionary Statements:	261+305+351+338
Signal Word:	Warning
ADR/RID:	



Ammonium hydrogendifluoride

Chemical formula:	NH ₄ HF ₂
Relative molecular weight:	57,04
CAS:	1341-49-7
EINECS:	215-676-4

pure (15010)

Appearance	white scales
Assay	min. 95,0 %
Sulphated ash	max. 0,02 %
Chloride (Cl ⁻)	max. 0,005 %
Fe (Iron)	max. 0,001 %
Heavy metals (as Pb)	max. 0,001 %

Hazard Statements:	301, 314
EUH Statements:	
Precautionary Statements:	280, 301+330+331, 305+351+338, 310

Signal Word:	Danger
ADR/RID:	UN 1727 8 /C2 /II



A

Ammonium hydroxide water solution
24%+

Chemical formula:	NH ₃
Relative molecular weight:	17,03
CAS:	1336-21-6
EINECS:	215-647-6

A.G. (10390)

Appearance	clear colourless liquid
Assay	min. 24,0 %
Residue after evaporation	max. 0,001 %
Chloride (Cl ⁻)	max. 0,0001 %
Total S (as SO ₄ ²⁻)	max. 0,0003 %
Carbonate (CO ₃ ²⁻)	max. 0,002 %
Ca (Calcium)	max. 0,0001 %
Fe (Iron)	max. 0,0001 %
Heavy metals	max. 0,0001 %

pure (10380)

Appearance	clear colourless liquid
Assay	min. 24,0 %
Residue after evaporation	max. 0,005 %
Chloride (Cl ⁻)	max. 0,0002 %
Total S (as SO ₄ ²⁻)	max. 0,001 %
Carbonate (CO ₃ ²⁻)	max. 0,003 %
Fe (Iron)	max. 0,0001 %

Hazard Statements:	314, 335, 400
EUH Statements:	
Precautionary Statements:	261, 273, 280, 310, 305+351+338
Signal Word:	Danger
ADR/RID:	UN 2672 8 /C5 /III



Ammonium chloride

Chemical formula:	NH ₄ Cl
Relative molecular weight:	53,49
CAS:	12125-02-9
EINECS:	235-186-4

A.G. (16050)

Appearance	white crystalline substance
Assay	min. 99,5 %
pH (5% water solution)	4,5 - 5,5
Loss on drying	max. 0,5 %
Sulfate (SO ₄ ²⁻)	max. 0,005 %
Fe (Iron)	max. 0,005 %
Heavy metals (as Pb)	max. 0,005 %

pure (16040)

Appearance	white crystalline substance
Assay	min. 99,0 %
pH (5% water solution)	4,5 - 6,0

Hazard Statements:	302, 319
EUH Statements:	
Precautionary Statements:	261, 305+351+338
Signal Word:	Warning
ADR/RID:	



Ammonium chromate

Chemical formula:	(NH ₄) ₂ CrO ₄
Relative molecular weight:	152,07
CAS:	7788-98-9
EINECS:	232-138-4

A.G. (17170)

Appearance	yellow-orange substance
Assay	min. 99,0 %
Chloride (Cl ⁻)	max. 0,001 %
Sulfate (SO ₄ ²⁻)	max. 0,01 %
Fe (Iron)	max. 0,002 %
Ca (Calcium)	max. 0,005 %

pure (29790)

Appearance	yellow-orange substance
Assay	min. 98,0 %
Hazard Statements:	350i, 314, 317, 334, 272, 410
EUH Statements:	
Precautionary Statements:	201, 220, 273, 280, 261, 305+351+338
Signal Word:	Danger
ADR/RID:	UN 3085 5.1 /OC2 /II



Ammonium iron (III) sulfate dodecahydrate

Chemical formula:	$\text{NH}_4\text{Fe}(\text{SO}_4)_2 \cdot 12 \text{H}_2\text{O}$
Relative molecular weight:	482,19
CAS:	7783-83-7
EINECS:	233-382-4

A.G. (25220)

Appearance	light purple crystals
Assay	min. 99,0 %
Chloride (Cl^-)	max. 0,005 %
Iron (Fe^{2+})	max. 0,001 %
Pb (Lead)	max. 0,005 %
pH (0,1M water solution, 25 °C)	~ 1,0

pure (25210)

Appearance	light purple crystals
Assay	min. 99,0 %
Iron (Fe^{2+})	max. 0,002 %

Hazard Statements:	319, 315
EUH Statements:	
Precautionary Statements:	305+351+338
Signal Word:	Warning
ADR/RID:	



Ammonium iron(II) sulfate hexahydrate

Chemical formula:	$(\text{NH}_4)_2\text{Fe}(\text{SO}_4)_2 \cdot 6 \text{H}_2\text{O}$
Relative molecular weight:	392,14
CAS:	7783-85-9
EINECS:	233-151-8

A.G. (25960)

Appearance	light green crystals
Assay	min. 99,5 %
Insoluble matter in water	max. 0,005 %
Chloride (Cl^-)	max. 0,005 %
Iron (Fe^{3+})	max. 0,01 %
Mn (Manganese)	max. 0,05 %
pH (5% water solution)	3,0 - 5,0

pure (25950)

Appearance	light green crystals
Assay	min. 99,0 %
Insoluble matter in water	max. 0,01 %
Iron (Fe^{3+})	max. 0,02 %

Hazard Statements:	319, 335, 315
EUH Statements:	
Precautionary Statements:	280, 305+351+338
Signal Word:	Warning
ADR/RID:	



Ammonium iron(III) citrate green

Chemical formula:	
Relative molecular weight:	
CAS:	1185-57-5
EINECS:	214-686-6

pure (11380)

Appearance	yellow-green powder
Assay (Fe)	14,5 - 16,0 %
Chloride (Cl^-)	max. 0,05 %
Sulfate (SO_4^{2-})	max. 0,1 %

Hazard Statements:	319, 335, 315
EUH Statements:	
Precautionary Statements:	261, 305+351+338
Signal Word:	Warning
ADR/RID:	



A

Ammonium metavanadate

Chemical formula:	NH ₄ VO ₃
Relative molecular weight:	116,98
CAS:	7803-55-6
EINECS:	232-261-3

A.G. (21100)

Appearance	white powder
Assay	min. 99,0 %
Chloride (Cl ⁻)	max. 0,005 %
Sulfate (SO ₄ ²⁻)	max. 0,01 %
Ca (Calcium)	max. 0,05 %
Fe (Iron)	max. 0,005 %
Pb (Lead)	max. 0,005 %

pure (30330)

Appearance	white powder
Assay	min. 98,0 %
Chloride (Cl ⁻)	max. 0,1 %
Sulfate (SO ₄ ²⁻)	max. 0,1 %
Hazard Statements:	301, 319, 332, 335, 372, 411
EUH Statements:	
Precautionary Statements:	260, 280, 301+330+331, 305+351+338, 310
Signal Word:	Danger
ADR/RID:	UN 2859 6.1 /T5 /II



Ammonium molybdate tetrahydrate

Chemical formula:	(NH ₄) ₆ Mo ₇ O ₂₄ · 4 H ₂ O
Relative molecular weight:	1235,86
CAS:	12054-85-2
EINECS:	234-320-9

A.G. (21750)

Appearance	white crystalline substance
Assay	min. 99,0 %
Insoluble matter in water	max. 0,005 %
Chloride (Cl ⁻)	max. 0,002 %
Sulfate (SO ₄ ²⁻)	max. 0,02 %
Fe (Iron)	max. 0,002 %
Heavy metals (as Pb)	max. 0,001 %

pure (21740)

Appearance	white crystalline substance
Assay	min. 98,5 %
Hazard Statements:	319, 335, 315
EUH Statements:	
Precautionary Statements:	305+351+338, 280
Signal Word:	Warning
ADR/RID:	



Ammonium nitrate

Chemical formula:	NH ₄ NO ₃
Relative molecular weight:	80,04
CAS:	6484-52-2
EINECS:	229-347-8

A.G. (12890)

Appearance	white crystalline substance
Assay	min. 99,0 %
pH (5% water solution, 20 °C)	4,5 - 6,0
Sulfate (SO ₄ ²⁻)	max. 0,01 %
Chloride (Cl ⁻)	max. 0,0005 %
Fe (Iron)	max. 0,0002 %
Sulfate (SO ₄ ²⁻)	max. 0,002 %

pure (12860)

Appearance	white crystalline substance
Assay	min. 98,0 %
Sulphated ash	max. 0,1 %
Chloride (Cl ⁻)	max. 0,001 %
Sulfate (SO ₄ ²⁻)	max. 0,01 %
Hazard Statements:	272, 315, 319, 335
EUH Statements:	
Precautionary Statements:	220, 261, 280, 305+351+338
Signal Word:	Danger
ADR/RID:	UN 1942 5.1 /O2 /III



Ammonium oxalate monohydrate

Chemical formula:	C ₂ H ₈ N ₂ O ₄ · H ₂ O
Relative molecular weight:	142,12
CAS:	60009-70-7
EINECS:	238-135-4

A.G. (26750)

Appearance	white crystalline substance
Assay	min. 98,0 %
pH (2,5% water solution)	6,0 - 7,0
Chloride (Cl ⁻)	max. 0,005 %
Sulfate (SO ₄ ²⁻)	max. 0,005 %
Fe (Iron)	max. 0,005 %
Heavy metals (as Pb)	max. 0,005 %

Hazard Statements:	302, 312
EUH Statements:	
Precautionary Statements:	280
Signal Word:	Warning
ADR/RID:	



Ammonium perchlorate

Chemical formula:	NH ₄ ClO ₄
Relative molecular weight:	117,49
CAS:	7790-98-9
EINECS:	232-235-1

A.G. (16950)

Appearance	white crystalline substance
Assay	min. 99,0 %
Sulfate (SO ₄ ²⁻)	max. 0,01 %
Fe (Iron)	max. 0,005 %
Heavy metals (as Pb)	max. 0,005 %

Hazard Statements:	201, 271
EUH Statements:	
Precautionary Statements:	210, 221
Signal Word:	Danger
ADR/RID:	UN 1442 5.1 /O2 /II



Ammonium peroxodisulfate

Chemical formula:	(NH ₄) ₂ S ₂ O ₈
Relative molecular weight:	228,2
CAS:	7727-54-0
EINECS:	231-786-5

A.G. (24030)

Appearance	yellowish crystals
Assay	min. 98,0 %
Sulphated ash	max. 0,05 %
Chloride (Cl ⁻)	max. 0,001 %
Fe (Iron)	max. 0,001 %
Heavy metals (as Pb)	max. 0,001 %
Free acids (as H ₂ SO ₄)	max. 0,2 %

pure (24020)

Appearance	yellowish crystals
Assay	min. 98,0 %

Hazard Statements:	272, 302, 319, 335, 315, 334, 317
EUH Statements:	
Precautionary Statements:	261, 280, 305+351+338, 337,+313, 342+311
Signal Word:	Danger
ADR/RID:	UN 1444 5.1 /O2 /III



A

Ammonium sulfate

Chemical formula:	(NH ₄) ₂ SO ₄
Relative molecular weight:	132,14
CAS:	7783-20-2
EINECS:	231-984-1

A.G. (25240)

Appearance	white crystalline substance
Assay	min. 99,5 %
pH (5% water solution, 25 °C)	5,0 - 6,0
Insoluble matter in water	max. 0,005 %
Chloride (Cl ⁻)	max. 0,001 %
Fe (Iron)	max. 0,001 %
Heavy metals (as Pb)	max. 0,001 %

pure (25230)

Appearance	white crystalline substance
Assay	min. 99,0 %
Insoluble matter in water	max. 0,01 %

Hazard Statements:	319, 335, 315
EUH Statements:	
Precautionary Statements:	280, 305+351+338
Signal Word:	Warning
ADR/RID:	



Ammonium tartrate dibasic

Chemical formula:	(NH ₄) ₂ C ₄ H ₄ O ₆
Relative molecular weight:	184,15
CAS:	3164-29-2
EINECS:	221-618-9

A.G. (28200)

Appearance	white crystalline substance
Assay	min. 99,0 %
Sulphated ash	max. 0,05 %
Chloride (Cl ⁻)	max. 0,005 %
Sulfate (SO ₄ ²⁻)	max. 0,005 %
Fe (Iron)	max. 0,005 %
Heavy metals (as Pb)	max. 0,005 %
pH (5% water solution)	5,0 - 7,0

Ammonium thiocyanate

Chemical formula:	NH ₄ SCN
Relative molecular weight:	76,12
CAS:	1762-95-4
EINECS:	217-175-6

A.G. (27240)

Appearance	white crystalline substance
Assay	min. 99,0 %
Sulphated ash	max. 0,025 %
Chloride (Cl ⁻)	max. 0,005 %
Sulfate (SO ₄ ²⁻)	max. 0,005 %
Fe (Iron)	max. 0,0001 %
Heavy metals (as Pb)	max. 0,0005 %

pure (27230)

Appearance	white crystalline substance
Assay	min. 98,5 %

Hazard Statements:	302, 312, 332, 412, 318
EUH Statements:	032
Precautionary Statements:	273, 280, 310
Signal Word:	Danger
ADR/RID:	



n-Amyl alcohol

Chemical formula:	CH ₃ (CH ₂) ₄ OH
Relative molecular weight:	88,15
CAS:	71-41-0
EINECS:	200-752-1

A.G. (22060)

Appearance	clear colourless liquid
Assay	min. 99,0 %
Free acids (as CH ₃ COOH)	max. 0,005 %
Residue after evaporation	max. 0,002 %
Water	max. 0,1 %
Density (20 °C)	0,815 g/cm ³
Boiling point	137 - 139 °C
Flash point	38 °C

pure (22050)

Appearance	clear colourless liquid
Assay	min 98,0 %
Density (20 °C)	0,815 g/cm ³
Refractive index	1,410
Boiling point	136 - 139 °C
Flash point	38 °C

Hazard Statements: 226, 332, 335, 315, 318

EUH Statements:

Precautionary Statements: 261, 302+352, 304+340, 305+351+338

Signal Word: Danger

ADR/RID: UN 1105 3 /F1 /III



Aniline

Chemical formula:	C ₆ H ₅ NH ₂
Relative molecular weight:	93,13
CAS:	62-53-3
EINECS:	200-539-3

A.G. (10480)

Appearance	clear yellowish liquid
Assay	min. 99,5 %
Water	max. 0,1 %
Ash	max. 0,01 %
Density (20 °C)	1,022 g/cm ³

pure (10450)

Appearance	clear yellowish liquid
Assay	min. 99,0 %
Density (20 °C)	1,022 g/cm ³
Refractive index	1,586

Hazard Statements: 351, 341, 331, 311, 301, 372, 318, 317, 400

EUH Statements:

Precautionary Statements: 261, 273, 280, 301+310, 308+313, 305+351+338

Signal Word: Danger

ADR/RID: UN 1547 6.1 /T1 /II



Anthranilic acid

Chemical formula:	NH ₂ C ₆ H ₄ COOH
Relative molecular weight:	137,14
CAS:	118-92-3
EINECS:	204-287-5

A.G. (18630)

Appearance	beige powder
Assay	min. 99,0 %
Sulphated ash	max. 0,03 %
Chloride (Cl ⁻)	max. 0,05 %
Sulfate (SO ₄ ²⁻)	max. 0,05 %
Heavy metals (as Pb)	max. 0,005 %
Melting point	145 - 147 °C

pure (18620)

Appearance	beige powder
Assay	min. 98,0 %
Melting point	144 - 147 °C

Hazard Statements: 319

EUH Statements:

Precautionary Statements: 305+351+338

Signal Word: Warning

ADR/RID:



A

Antimony(III) chloride

Chemical formula:	SbCl ₃
Relative molecular weight:	228,11
CAS:	10025-91-9
EINECS:	233-047-2

A.G. (16070)

Appearance	white crystalline substance
Assay	min. 99,0 %
Sulfate (SO ₄ ²⁻)	max. 0,005 %
Fe (Iron)	max. 0,0005 %
Heavy metals (as Pb)	max. 0,005 %

pure (16060)

Appearance	white crystalline substance
Assay	min. 98,0 %
Hazard Statements:	314, 411
EUH Statements:	
Precautionary Statements:	273, 301+330+331, 305+351+338, 310
Signal Word:	Danger
ADR/RID:	UN 1733 8 /C2 /II



Antimony(III) oxide

Chemical formula:	Sb ₂ O ₃
Relative molecular weight:	291,5
CAS:	1309-64-4
EINECS:	215-175-0

A.G. (23030)

Appearance	white powder
Assay	min. 99,0 %
Chloride (Cl ⁻)	max. 0,05 %
Sulfate (SO ₄ ²⁻)	max. 0,01 %
Fe (Iron)	max. 0,003 %
Pb (Lead)	max. 0,01 %

pure (23020)

Appearance	white powder
Assay	min. 99,0 %
Hazard Statements:	351
EUH Statements:	
Precautionary Statements:	280, 308+313
Signal Word:	Warning
ADR/RID:	



Arsenic(III) oxide

Chemical formula:	As ₂ O ₃
Relative molecular weight:	197,84
CAS:	1327-53-3
EINECS:	215-481-4

A.G. (23070)

Appearance	white to beige powder
Assay	min. 99,5 %
Insoluble matter in NH ₄ OH	max. 0,01 %
Chloride (Cl ⁻)	max. 0,005 %
Fe (Iron)	max. 0,001 %
Pb (Lead)	max. 0,002 %

Hazard Statements:	300, 350, 314, 410
EUH Statements:	
Precautionary Statements:	201, 273, 280, 301+310, 305+351+338
Signal Word:	Danger
ADR/RID:	UN 1561 6.1 /T5 /II



L-Ascorbic acid

Chemical formula:	C ₆ H ₈ O ₆
Relative molecular weight:	176,13
CAS:	50-81-7
EINECS:	200-066-2

[A.G. \(18650\)](#)

Appearance	white crystalline substance
Assay	min. 99,5 %
Sulphated ash	max. 0,05 %
Loss on drying (105°C)	max. 0,1 %
Chloride (Cl ⁻)	max. 0,005 %
Sulfate (SO ₄ ²⁻)	max. 0,002 %
Fe (Iron)	max. 0,001 %
Heavy metals (as Pb)	max. 0,001 %
pH (5% water solution, 20 °C)	2,2 - 2,5
[α] _{D20} (c = 10 in water)	+21 +/- 0,5 °

Azure II - Eosin

Chemical formula:	
Relative molecular weight:	
CAS:	53092-85-6
EINECS:	

[See below \(10640\)](#)

Appearance	dark green powder
Functional test	passes test
Hazard Statements:	318
EUH Statements:	
Precautionary Statements:	280, 305+351+338
Signal Word:	Danger
ADR/RID:	



B

Barbituric acid

Chemical formula:	C ₄ H ₄ N ₂ O ₃
Relative molecular weight:	128,09
CAS:	67-52-7
EINECS:	200-658-0

[See below \(30540\)](#)

Appearance	yellowish to beige powder
Assay	min. 99,0 %
Melting point	248 - 255 °C

Barium carbonate

Chemical formula:	BaCO ₃
Relative molecular weight:	197,4
CAS:	513-77-9
EINECS:	208-167-3

[A.G. \(27780\)](#)

Appearance	white powder
Assay	min. 99,0 %
Chloride (Cl ⁻)	max. 0,03 %
Ca (Calcium)	max. 0,05 %
Fe (Iron)	max. 0,005 %
Pb (Lead)	max. 0,005 %

[pure \(27770\)](#)

Appearance	white powder
Assay	min. 99,0 %
Hazard Statements:	302
EUH Statements:	
Precautionary Statements:	
Signal Word:	Warning
ADR/RID:	UN 1564 6.1 /T5 /III



Barium hydroxide octahydrate

Chemical formula:	Ba(OH) ₂ · 8 H ₂ O
Relative molecular weight:	315,48
CAS:	12230-71-6
EINECS:	241-234-5

[A.G. \(15440\)](#)

Appearance	white crystalline substance
Assay	min. 98,0 %
Chloride (Cl ⁻)	max. 0,005 %
Fe (Iron)	max. 0,005 %
Heavy metals (as Pb)	max. 0,005 %
BaCO ₃	max. 2,0 %

[pure \(15430\)](#)

Appearance	white crystalline substance
Assay	min. 98,0 %
Hazard Statements:	302, 332, 314
EUH Statements:	
Precautionary Statements:	280, 305+351+338, 310
Signal Word:	Danger
ADR/RID:	UN 3262 8 /C6 /II



Barium chloride dihydrate

Chemical formula:	BaCl ₂ · 2 H ₂ O
Relative molecular weight:	244,28
CAS:	10326-27-9
EINECS:	233-788-1

A.G. (16100)

Appearance	white crystalline substance
Assay	min. 99,0 %
pH (5% water solution)	5,0 - 8,0
Ca (Calcium)	max. 0,05 %
Fe (Iron)	max. 0,005 %
Heavy metals (as Pb)	max. 0,005 %

pure (16090)

Appearance	white crystalline substance
Assay	min. 99,0 %
Hazard Statements:	301, 332
EUH Statements:	
Precautionary Statements:	405, 301+310
Signal Word:	Danger
ADR/RID:	UN 1564 6.1 /T5 /III



Barium chromate

Chemical formula:	BaCrO ₄
Relative molecular weight:	253,33
CAS:	10294-40-3
EINECS:	233-660-5

A.G. (17200)

Appearance	yellow powder
Assay	min. 99,0 %
Insoluble matter in HCl	max. 0,1 %
Chloride (Cl ⁻)	max. 0,01 %
Fe (Iron)	max. 0,005 %

pure (17190)

Appearance	yellow powder
Assay	min. 98,0 %
Hazard Statements:	272, 302, 332, 350
EUH Statements:	
Precautionary Statements:	201, 280, 301+312, 304+340, 308+313
Signal Word:	Danger
ADR/RID:	UN 1479 5.1 /O2 /II



Barium nitrate

Chemical formula:	Ba(NO ₃) ₂
Relative molecular weight:	261,35
CAS:	10022-31-8
EINECS:	233-020-5

A.G. (12920)

Appearance	white crystalline substance
Assay	min. 99,0 %
pH (5% water solution, 20 °C)	5,0 - 8,0
Insoluble matter in water	max. 0,01 %
Chloride (Cl ⁻)	max. 0,005 %
Ca (Calcium)	max. 0,01 %

pure (12910)

Appearance	white crystalline substance
Assay	min. 99,0 %
Hazard Statements:	272, 302, 332
EUH Statements:	
Precautionary Statements:	220, 302+352
Signal Word:	Danger
ADR/RID:	UN 1446 5.1 /OT2 /II



B

Barium oxide

Chemical formula:	BaO
Relative molecular weight:	153,34
CAS:	1304-28-5
EINECS:	215-127-9

[pure \(23080\)](#)

Appearance	almost white powder
Assay	min. 90,0 %
BaO ₂	max. 5,0 %

Hazard Statements:	301, 332, 314
EUH Statements:	
Precautionary Statements:	280, 301+310, 305+351+338, 310
Signal Word:	Danger
ADR/RID:	UN 1884 6.1 /T5 /III



Barium sulfate

Chemical formula:	BaSO ₄
Relative molecular weight:	233,4
CAS:	7727-43-7
EINECS:	231-784-4

[A.G. \(25260\)](#)

Appearance	white powder
Loss on ignition (600°C)	max. 2,0 %
Heavy metals (as Pb)	max. 0,001 %

Benzaldehyde

Chemical formula:	C ₆ H ₅ CHO
Relative molecular weight:	106,12
CAS:	100-52-7
EINECS:	202-860-4

[A.G. \(10700\)](#)

Appearance	clear colourless liquid
Assay	min. 99,0 %
Free acids (as benzoic acid)	max. 0,25 %
Boiling point	177 - 179 °C
Density (20 °C)	1,05 g/cm ³
Refractive index	1,544 - 1,546

[pure \(10690\)](#)

Appearance	clear yellowish liquid
Assay	min. 98,0%
Color scale (APHA)	max. 40
Refractive index	1,543-1,546

Hazard Statements:	302
EUH Statements:	
Precautionary Statements:	262
Signal Word:	Warning
ADR/RID:	UN 1990 9 /M11 /III



Benzoic acid

Chemical formula:	C ₆ H ₅ COOH
Relative molecular weight:	122,12
CAS:	65-85-0
EINECS:	200-618-2

A.G. (18690)

Appearance	white crystalline substance
Assay	min. 99,5 %
Sulphated ash	max. 0,005 %
Halogenated compounds (as Cl)	max. 0,05 %
Fe (Iron)	max. 0,001 %
Heavy metals (as Pb)	max. 0,001 %
Melting point	121 - 123 °C

Hazard Statements:	372, 315, 318
EUH Statements:	
Precautionary Statements:	280, 305+351+338, 314
Signal Word:	Danger
ADR/RID:	



1,2,3-Benzotriazole

Chemical formula:	C ₆ H ₅ N ₃
Relative molecular weight:	119,13
CAS:	95-14-7
EINECS:	202-394-1

for photo (28790)

Appearance	white crystalline substance
Assay	min. 99,0 %
Melting point	95 - 97 °C

Hazard Statements:	332, 302, 319, 412
EUH Statements:	
Precautionary Statements:	280, 305+351+338
Signal Word:	Warning
ADR/RID:	



Benzyl alcohol

Chemical formula:	C ₆ H ₅ CH ₂ OH
Relative molecular weight:	108,14
CAS:	100-51-6
EINECS:	202-859-9

A.G. (10890)

Appearance	clear colourless liquid
Assay	min. 99,5 %
Residue after evaporation	max. 0,05 %
Benzaldehyde	max. 0,1 %
Free acids (as benzoic acid)	max. 0,25 %
Chlorine compounds	max. 0,01 %
Boiling point	203 - 205 °C
Density (20 °C)	1,044 g/cm ³
Refractive index	1,540

pure (10880)

Appearance	clear colourless liquid
Assay	min. 99,0 %
Boiling point	203 - 205 °C
Density (20 °C)	1,045 g/cm ³
Refractive index	1,541

Hazard Statements:	332, 302
EUH Statements:	
Precautionary Statements:	271
Signal Word:	Warning
ADR/RID:	



B

Benzyl chloride

Chemical formula:	C ₆ H ₅ CH ₂ Cl
Relative molecular weight:	126,59
CAS:	100-44-7
EINECS:	202-853-6

A.G. (10910)

Appearance	clear colourless liquid
Assay	min. 99,0 %
Boiling point	177 - 181 °C
Density (20 °C)	1,097 - 1,103 g/cm ³
Refractive index	1,537 - 1,539

pure (10900)

Appearance	clear colourless liquid
Assay	min. 98,5 %
Density (20 °C)	1,097 - 1,103 g/cm ³
Refractive index	1,537 - 1,539

Hazard Statements:	350, 331, 302, 373, 335, 315, 318
EUH Statements:	
Precautionary Statements:	201, 261, 280, 304+340, 305+351+338, 308+313
Signal Word:	Danger
ADR/RID:	UN 1738 6.1 /TC1 /II



Bismuth(III) nitrate basic

Chemical formula:	BiNO ₄
Relative molecular weight:	286,98
CAS:	10361-46-3
EINECS:	233-792-3

A.G. (12960)

Appearance	white crystalline substance
Bismuth content (dried)	71,0 - 74,0 %
Chloride (Cl ⁻)	max. 0,01 %
Sulfate (SO ₄ ²⁻)	max. 0,02 %
Cu (Copper)	max. 0,005 %
Fe (Iron)	max. 0,005 %

Hazard Statements:	272, 315, 319, 335
EUH Statements:	
Precautionary Statements:	220, 261, 280, 305+351+338
Signal Word:	Danger
ADR/RID:	UN 1477 5.1 /O2 /II



Bismuth(III) nitrate pentahydrate

Chemical formula:	Bi(NO ₃) ₃ · 5 H ₂ O
Relative molecular weight:	485,07
CAS:	10035-06-0
EINECS:	233-791-8

A.G. (12940)

Appearance	white crystalline substance
Assay	min. 99,0 %
Insoluble matter in HNO ₃	max. 0,005 %
Chloride (Cl ⁻)	max. 0,005 %
Sulfate (SO ₄ ²⁻)	max. 0,005 %
Pb (Lead)	max. 0,005 %
Fe (Iron)	max. 0,005 %

Hazard Statements:	272, 315, 319, 335
EUH Statements:	
Precautionary Statements:	220, 261, 280, 305+351+338
Signal Word:	Danger
ADR/RID:	UN 1477 5.1 /O2 /II



Bismuth(III) oxide

Chemical formula:	Bi ₂ O ₃
Relative molecular weight:	465,96
CAS:	1304-76-3
EINECS:	215-134-7

pure (23090)

Appearance	light yellow powder
Assay	min. 98,0 %
Hazard Statements:	319, 335, 315
EUH Statements:	
Precautionary Statements:	261, 280, 305+351+338
Signal Word:	Warning
ADR/RID:	



Boric acid

Chemical formula:	H ₃ BO ₃
Relative molecular weight:	61,83
CAS:	10043-35-3
EINECS:	233-139-2

A.G. (18730)

Appearance	white powder
Assay	min. 99,5 %
Insoluble matter in water	max. 0,005 %
Substance nonvolatile with methanol	max. 0,3 %
Chloride (Cl ⁻)	max. 0,001 %
Sulfate (SO ₄ ²⁻)	max. 0,015 %
Fe (Iron)	max. 0,001 %
Heavy metals (as Pb)	max. 0,001 %
pH (saturated solution, 25 °C)	3,4 - 4,4

pure (18710)

Appearance	white powder
Assay	min. 99,0 %
Insoluble matter in water	max. 0,05 %
Hazard Statements:	360FD
EUH Statements:	
Precautionary Statements:	201, 308+313
Signal Word:	Danger
ADR/RID:	



Brilliant Green

Chemical formula:	C ₂₇ H ₃₄ N ₂ O ₄ S
Relative molecular weight:	482,63
CAS:	633-03-4
EINECS:	211-190-1

indicator (28470)

Appearance	shiny metallic crystals
Infrared spectrometry	passes test
Hazard Statements:	302, 319
EUH Statements:	
Precautionary Statements:	280, 305+351+338
Signal Word:	Warning
ADR/RID:	



B

Bromine

Chemical formula:	Br ₂
Relative molecular weight:	159,82
CAS:	7726-95-6
EINECS:	231-778-1

A.G. (11040)

Appearance	reddish brown liquid
Assay	min. 99,0 %
Sulfate (SO ₄ ²⁻)	max. 0,005 %
Residue after evaporation	max. 0,005 %
Density (20 °C)	3,110 g/cm ³

pure (11030)

Appearance	reddish brown liquid
Assay	min. 98,0 %
Hazard Statements:	330, 314, 400
EUH Statements:	
Precautionary Statements:	280, 273, 305+351+338
Signal Word:	Danger
ADR/RID:	UN 1744 8 /CT1 /I



Bromobenzene

Chemical formula:	C ₆ H ₅ Br
Relative molecular weight:	157,01
CAS:	108-86-1
EINECS:	203-623-8

A.G. (11050)

Appearance	almost clear colourless liquid
Assay	min. 99,5%
Density (20 °C)	1,493 - 1,495 g/cm ³
Refractive index	1,558 - 1,560

Hazard Statements:	226, 315, 411
EUH Statements:	
Precautionary Statements:	210, 273, 302+352
Signal Word:	Warning
ADR/RID:	UN 2514 3 /F1 /III



Bromoform

Chemical formula:	CHBr ₃
Relative molecular weight:	252,75
CAS:	75-25-2
EINECS:	200-854-6

A.G. (11190)

Appearance	clear yellowish liquid
Assay	min. 99,0 %
Boiling point	149 - 150 °C
Density (20 °C)	2,89 g/cm ³
Refractive index	1,596
Stabilizer	Amylen ~ 0,05 %

pure (31510)

Appearance	clear yellowish liquid
Assay	~ 97 %
Density (20 °C)	2,82 g/cm ³
Stabilizer	Amylen ~ 0,05 %
Hazard Statements:	302, 331, 319, 315, 411
EUH Statements:	
Precautionary Statements:	273, 302+352, 304+340, 305+351+338
Signal Word:	Danger
ADR/RID:	UN 2515 6.1 /T1 /III



1-Butanol

Chemical formula:	CH ₃ (CH ₂) ₃ OH
Relative molecular weight:	74,12
CAS:	71-36-3
EINECS:	200-751-6

A.G. (22130)

Appearance	clear colourless liquid
Assay	min. 99,5 %
Free acids (as C ₃ H ₇ COOH)	max. 0,005 %
Residue after evaporation	max. 0,003 %
Water	max. 0,2 %
Isobutyl alcohol	max. 0,1 %
Boiling point	116 - 118 °C
Density (20 °C)	0,810 g/cm ³
Refractive index	1,399
Flash point	34 °C

pure (22120)

Appearance	clear colourless liquid
Assay	min. 99,0 %
Boiling point	116 - 118 °C
Density (20 °C)	0,810 g/cm ³
Refractive index	1,400
Flash point	34 °C

99%+ (42620)

Appearance	clear colourless liquid
Assay	min. 99,0 %
Residue after evaporation	max. 0,005 %
Water	max. 0,35 %
Isobutyl alcohol	max. 0,15 %
Density (20 °C)	0,810 g/cm ³
Refractive index	1,399

Hazard Statements:	226, 302, 315, 318, 335, 336
EUH Statements:	
Precautionary Statements:	261, 280, 305+351+338
Signal Word:	Danger
ADR/RID:	UN 1120 3 /F1 /III



2-Butanol

Chemical formula:	CH ₃ CH ₂ CH(OH)CH ₃
Relative molecular weight:	74,12
CAS:	78-92-2
EINECS:	201-158-5

A.G. (25050)

Appearance	clear colourless liquid
Assay	min. 99,5 %
Water	max. 0,2 %
Residue after evaporation	max. 0,001 %
Free acids (as CH ₃ COOH)	max. 0,01 %
<i>tert</i> -Butanol	max. 0,1 %
2-Propanol	max. 0,2 %
Methyl ethyl ketone	max. 0,1 %
Dibutyl ether	max. 0,2 %
Boiling point	98,5 - 100 °C
Density (20 °C)	0,806 - 0,808 g/cm ³
Flash point	23 °C

pure (25040)

Appearance	clear colourless liquid
Assay	min. 99,0 %
Boiling point	98 - 100 °C
Density (20 °C)	0,807 g/cm ³
Refractive index	1,396
Flash point	23 °C

Hazard Statements:	226, 319, 335, 336
EUH Statements:	
Precautionary Statements:	210, 261, 305+351+338
Signal Word:	Warning
ADR/RID:	UN 1120 3 /F1 /III



tert-Butanol

Chemical formula:	C ₄ H ₁₀ O
Relative molecular weight:	74,12
CAS:	75-65-0
EINECS:	200-889-7

A.G. (26830)

Appearance	clear colourless liquid
Assay	min. 99,5 %
Water	max. 0,1 %
Residue after evaporation	max. 0,003 %
Boiling point	82 - 83 °C
Density (20 °C)	0,775 - 0,785 g/cm ³
Refractive index	1,385
Flash point	11 °C

pure (26820)

Assay	min. 99,0 %
Boiling point	82 - 83 °C
Density (20 °C)	0,775 - 0,785 g/cm ³
Flash point	11 °C
Appearance	clear colourless liquid

Hazard Statements:	225, 332, 319, 335
EUH Statements:	
Precautionary Statements:	210, 261, 305+351+338
Signal Word:	Danger
ADR/RID:	UN 1120 3 /F1 /II



B

***n*-Butyl acetate**

Chemical formula:	CH ₃ COO(CH ₂) ₃ CH ₃
Relative molecular weight:	116,16
CAS:	123-86-4
EINECS:	204-658-1

A.G. (22170)

Appearance	clear colourless liquid
Assay	min. 99,0 %
Water	max. 0,1 %
Residue after evaporation	max. 0,001 %
Free acids (as CH ₃ COOH)	max. 0,01 %
Boiling point	123,5 - 127,5 °C
Density (20 °C)	0,881 g/cm ³
Refractive index	1,394
Flash point	22 °C

pure (22160)

Appearance	clear colourless liquid
Assay	min. 98,5 %
Water	max. 0,2 %
Boiling point	123 - 128 °C
Density (20 °C)	0,881 g/cm ³
Refractive index	1,394
Flash point	22 °C

Hazard Statements:	226, 336
EUH Statements:	
Precautionary Statements:	210, 261
Signal Word:	Warning
ADR/RID:	UN 1123 3 /F1 /II

***tert*-Butyl methyl ether**

Chemical formula:	C ₅ H ₁₂ O
Relative molecular weight:	88,15
CAS:	1634-04-4
EINECS:	216-653-1

pure (26840)

Assay	min. 98,0 %
Density (20 °C)	0,740 g/cm ³
Refractive index	1,369
Appearance	clear colourless liquid

Hazard Statements:	225, 315
EUH Statements:	
Precautionary Statements:	210, 261, 403+235
Signal Word:	Danger
ADR/RID:	UN 2398 3 /F1 /II



Cadmium

Chemical formula:	Cd
Relative molecular weight:	112,4
CAS:	7440-43-9
EINECS:	231-152-8

pure (17780)

Appearance	silvery metallic granules
Assay	min. 99,5 %
Fe (Iron)	max. 0,002 %
Hazard Statements:	350, 341, 361fd, 330, 372, 410
EUH Statements:	
Precautionary Statements:	201, 273, 280, 308 + 313, 304 + 340, 310
Signal Word:	Danger
ADR/RID:	UN 2570 6.1 /T5 /I



Cadmium acetate dihydrate

Chemical formula:	(CH ₃ COO) ₂ Cd · 2 H ₂ O
Relative molecular weight:	266,52
CAS:	5743-04-4
EINECS:	208-853-2

A.G. (22600)

Appearance	white crystalline substance
Assay	min. 98,0 %
Chloride (Cl ⁻)	max. 0,005 %
Sulfate (SO ₄ ²⁻)	max. 0,005 %
Fe (Iron)	max. 0,005 %
Pb (Lead)	max. 0,005 %
Hazard Statements:	302, 312, 332, 410
EUH Statements:	
Precautionary Statements:	273, 280
Signal Word:	Warning
ADR/RID:	UN 2570 6.1 /T5 /III



Cadmium chloride dihydrate

Chemical formula:	CdCl ₂ · 2 H ₂ O
Relative molecular weight:	219,34
CAS:	10108-64-2
EINECS:	72589-96-9

pure (16350)

Appearance	white crystalline substance
Assay	min. 96,0 %
Hazard Statements:	350, 340, 360FD, 330, 301, 372, 410
EUH Statements:	
Precautionary Statements:	201, 273, 260, 284, 310
Signal Word:	Danger
ADR/RID:	UN 2570 6.1 /T5 /III



C

Cadmium nitrate tetrahydrate

Chemical formula:	Cd(NO ₃) ₂ · 4 H ₂ O
Relative molecular weight:	308,47
CAS:	10022-68-1
EINECS:	233-710-6

A.G. (13050)

Appearance	white crystalline substance
Assay	min. 99,0 %
Chloride (Cl ⁻)	max. 0,005 %
Sulfate (SO ₄ ²⁻)	max. 0,005 %
Fe (Iron)	max. 0,005 %
Pb (Lead)	max. 0,005 %

pure (13040)

Appearance	white crystalline substance
Assay	min. 98,0 %
Hazard Statements:	272, 332, 312, 302, 410
EUH Statements:	
Precautionary Statements:	220, 273, 280
Signal Word:	Danger
ADR/RID:	UN 1477 5.1 /O2 /II



Cadmium sulfate hydrate

Chemical formula:	CdSO ₄ · 8/3 H ₂ O
Relative molecular weight:	256,57
CAS:	7790-84-3
EINECS:	233-331-6

A.G. (25550)

Appearance	white powder
Assay	min. 99,0 %
pH (5% water solution)	4,0 - 6,0
Chloride (Cl ⁻)	max. 0,005 %
Fe (Iron)	max. 0,005 %
Pb (Lead)	max. 0,005 %

Hazard Statements: 350, 340, 360FD, 330, 301, 372, 410

EUH Statements:
Precautionary Statements: 201, 273, 304+340, 308+313, 310
Signal Word: Danger
ADR/RID: UN 2570 6.1 /T5 /III



Calcium acetate hydrate

Chemical formula:	(CH ₃ COO) ₂ Ca · aq
Relative molecular weight:	
CAS:	114460-21-8
EINECS:	200-540-9

A.G. (22800)

Appearance	white powder
Assay (dried substance)	99 - 100 %
Insoluble matter in water	max. 0,3 %
Substances reducing KMnO ₄ (as HCOOH)	max. 0,1 %
pH (10% water solution, 20 °C)	7,0 - 9,0
Water	max. 7,0 %
Chloride (Cl ⁻)	max. 0,03 %
Sulfate (SO ₄ ²⁻)	max. 0,05 %
Fe (Iron)	max. 0,002 %
Heavy metals (as Pb)	max. 0,001 %

Hazard Statements: 319, 335, 315
EUH Statements:
Precautionary Statements: 280, 305+351+338
Signal Word: Warning
ADR/RID:



Calcium carbonate precipitated

Chemical formula:	CaCO ₃
Relative molecular weight:	100,09
CAS:	471-34-1
EINECS:	207-439-9

A.G. (28060)

Appearance	white powder
Assay	min. 99,0 %
Chloride (Cl ⁻)	max. 0,05 %
Sulfate (SO ₄ ²⁻)	max. 0,05 %
Fe (Iron)	max. 0,02 %
Heavy metals (as Pb)	max. 0,005 %
Insoluble matter in CH ₃ COOH	max. 0,2 %

pure (28050)

Appearance	white powder
Assay	min. 98,0 %
Insoluble matter in CH ₃ COOH	max. 0,2 %
Fe (Iron)	max. 0,1 %

99%+ (44790)

Appearance	white powder
Assay	min. 99,0 %
Insoluble matter in CH ₃ COOH	max. 0,2 %
Fe (Iron)	max. 0,1 %

Calcium hydroxide

Chemical formula:	Ca(OH) ₂
Relative molecular weight:	74,1
CAS:	1305-62-0
EINECS:	215-137-3

A.G. (15840)

Appearance	white powder
Assay	min. 96,0 %
CaCO ₃	max. 4,0 %
Chloride (Cl ⁻)	max. 0,02 %
Sulfate (SO ₄ ²⁻)	max. 0,05 %
Fe (Iron)	max. 0,05 %
Heavy metals (as Pb)	max. 0,005 %

pure (15820)

Appearance	white powder
Assay	min. 80,0 %

ACS (31790)

Appearance	white powder
Assay	min. 95,0 %
CaCO ₃	max. 4,0 %
Chloride (Cl ⁻)	max. 0,02 %
Sulfate (SO ₄ ²⁻)	max. 0,05 %
Fe (Iron)	max. 0,05 %
Heavy metals (as Pb)	max. 0,005 %

Hazard Statements:	315 318 335
EUH Statements:	
Precautionary Statements:	280, 310, 305+351+338
Signal Word:	Danger
ADR/RID:	



Calcium chloride anhydrous granulated

Chemical formula:	CaCl ₂
Relative molecular weight:	110,99
CAS:	10043-52-4
EINECS:	233-140-8

A.G. (16770)

Appearance	white granules
Assay	min. 95,0 %
Particle size	1 - 6 mm
Insoluble matter	max. 0,05 %

pure (16760)

Appearance	white granules
Assay	min. 90,0 %

Hazard Statements:	319
EUH Statements:	
Precautionary Statements:	280, 305+351+338
Signal Word:	Warning
ADR/RID:	



C

Calcium chloride anhydrous powder

Chemical formula:	CaCl ₂
Relative molecular weight:	110,99
CAS:	10043-52-4
EINECS:	233-140-8

A.G. (16750)

Appearance	white powder
Assay	min. 94,0 %
Insoluble matter	max. 0,05 %

pure (16720)

Appearance	white powder
Assay	min. 90,0 %

Hazard Statements:	319
EUH Statements:	
Precautionary Statements:	280, 305+351+338
Signal Word:	Warning
ADR/RID:	



Calcium chloride dihydrate

Chemical formula:	CaCl ₂ · 2 H ₂ O
Relative molecular weight:	147,02
CAS:	10035-04-8
EINECS:	233-140-8

A.G. (16790)

Appearance	white powder
Assay	min. 99,0 %
pH (5% water solution)	4,5 - 7,0
Total nitrogen (as N)	max. 0,002 %
Sulfate (SO ₄ ²⁻)	max. 0,005 %
Fe (Iron)	max. 0,005 %
Heavy metals (as Pb)	max. 0,002 %
Insoluble matter	max. 0,01 %

pure (16780)

Appearance	white powder
Assay	min. 99,0 %
Insoluble matter	max. 0,01 %

Hazard Statements:	319
EUH Statements:	
Precautionary Statements:	305+351+338
Signal Word:	Warning
ADR/RID:	



Calcium chloride hexahydrate

Chemical formula:	CaCl ₂ · 6 H ₂ O
Relative molecular weight:	219,08
CAS:	7774-34-7
EINECS:	233-140-8

A.G. (16810)

Appearance	white scales
Assay	min. 99,0 %
Free acids (as HCl)	max. 0,01 %
Sulfate (SO ₄ ²⁻)	max. 0,005 %
Ammonium (NH ₄ ⁺)	max. 0,02 %
Magnesium and alkaline-earth metals	max. 0,2 %
Fe (Iron)	max. 0,002 %
Heavy metals (as Pb)	max. 0,001 %
Insoluble matter	max. 0,01 %

pure (16800)

Appearance	white scales
Assay	min. 98,0 %

Hazard Statements:	319
EUH Statements:	
Precautionary Statements:	280, 305+351+338
Signal Word:	Warning
ADR/RID:	



Calcium nitrate tetrahydrate

Chemical formula:	Ca(NO ₃) ₂ · 4 H ₂ O
Relative molecular weight:	236,15
CAS:	13477-34-4
EINECS:	233-332-1

A.G. (13340)

Appearance	white crystalline substance
Assay	min. 99,0 %
pH (5% water solution, 20 °C)	4,5 - 7,0
Sulfate (SO ₄ ²⁻)	max. 0,02 %
Chloride (Cl ⁻)	max. 0,005 %
Fe (Iron)	max. 0,005 %
Heavy metals (as Pb)	max. 0,005 %
Mg (Magnesium)	max. 0,05 %

pure (13330)

Appearance	white crystalline substance
Assay	min. 99,0 %
Mg (Magnesium)	max. 0,1 %

98%+ (45520)

Appearance	white crystalline substance
Assay	min. 98,0 %
pH (5% water solution, 20 °C)	4,5 - 7,0
Sulfate (SO ₄ ²⁻)	max. 0,02 %
Chloride (Cl ⁻)	max. 0,01 %
Fe (Iron)	max. 0,01 %
Heavy metals (as Pb)	max. 0,01 %
Mg (Magnesium)	max. 0,1 %

Hazard Statements:	272, 319
EUH Statements:	
Precautionary Statements:	220, 305+351+338
Signal Word:	Warning
ADR/RID:	UN 1454 5.1 /O2 /III



Calcium oxide

Chemical formula:	CaO
Relative molecular weight:	56,08
CAS:	1305-78-8
EINECS:	215-138-9

A.G. (23460)

Appearance	almost white powder
Assay (on ignition subst.)	min. 97,0 %
Insoluble matter in HCl	max. 0,5 %
Loss on ignition	max. 3,0 %

pure (23450)

Appearance	almost white powder
Assay (on ignition subst.)	min. 96,0 %

Hazard Statements:	314
EUH Statements:	
Precautionary Statements:	280, 305+351+338, 310
Signal Word:	Danger
ADR/RID:	



Calcium sulfate dihydrate

Chemical formula:	CaSO ₄ · 2 H ₂ O
Relative molecular weight:	172,17
CAS:	10101-41-4
EINECS:	231-900-3

A.G. (25830)

Appearance	white powder
Assay	min. 99,0 %
Chloride (Cl ⁻)	max. 0,005 %
Fe (Iron)	max. 0,005 %
Heavy metals (as Pb)	max. 0,005 %

ACS (31090)

Appearance	greyish powder
Assay	98,0 - 102,0 %
Insoluble matter in dilute HCl	max. 0,02 %
Chloride (Cl ⁻)	max. 0,005 %
Nitrate (NO ₃ ⁻)	passes test
Carbonate (CO ₃ ²⁻)	passes test
Fe (Iron)	max. 0,001 %
Mg (Magnesium)	max. 0,02 %
K (Potassium)	max. 0,005 %
Na (Sodium)	max. 0,02 %
Sr (Strontium)	max. 0,05 %
Heavy metals (as Pb)	max. 0,002 %

Hazard Statements:	
EUH Statements:	
Precautionary Statements:	260, 262
Signal Word:	Danger
ADR/RID:	

C

Carbon disulfide

Chemical formula:	CS ₂
Relative molecular weight:	76,14
CAS:	75-15-0
EINECS:	200-843-6

[See below \(32440\)](#)

Appearance	slightly yellowish liquid
Assay	min. 99,5 %
Residue after evaporation	max. 0,002 %
Hazard Statements:	225, 361fd, 372, 319, 315, 332
EUH Statements:	
Precautionary Statements:	210, 280, 304+340, 314
Signal Word:	Danger
ADR/RID:	UN 1131 3 /FT1 /I



Cellulose microcrystalline

Chemical formula:	
Relative molecular weight:	
CAS:	9004-34-6
EINECS:	232-674-9

[See below \(11250\)](#)

Appearance	white powder
pH	5,0 - 7,5
Sulphated ash	max. 0,15 %
Loss on drying (105°C)	max. 7,0 %

Cetyltrimethylammonium bromide

Chemical formula:	C ₁₉ H ₄₂ BrN
Relative molecular weight:	364,46
CAS:	57-09-0
EINECS:	200-311-3

[A.G. \(11350\)](#)

Appearance	white powder
Assay	min. 99,0 %
Water	max. 0,5 %
Melting point	248 - 253 °C

[pure \(11340\)](#)

Appearance	white powder
Assay	min. 98,0 %

[See below \(43390\)](#)

Appearance	white powder
Assay	min. 96,0 %
Hazard Statements:	302, 315, 318, 335, 373, 410
EUH Statements:	
Precautionary Statements:	261, 273, 280, 305+351+338
Signal Word:	Danger
ADR/RID:	UN 3077 9 /M7 /III



Chloral hydrate

Chemical formula:	Cl ₃ CCH(OH) ₂
Relative molecular weight:	165,4
CAS:	302-17-0
EINECS:	206-117-5

A.G. (15930)

Appearance	white crystalline substance
Assay	min. 99,5 %
Chloride (Cl ⁻)	max. 0,01 %
Heavy metals (as Pb)	max. 0,002 %

pure (15920)

Appearance	white crystalline substance
Assay	min. 99,0 %
Melting point	52 - 57,5 °C
Hazard Statements:	301, 319, 315
EUH Statements:	
Precautionary Statements:	301+310, 302+352, 305+351+338
Signal Word:	Danger
ADR/RID:	UN 2811 6.1 /II /T2



Chloramine T trihydrate

Chemical formula:	CH ₃ C ₆ H ₄ SO ₂ NCINa · 3 H ₂ O
Relative molecular weight:	281,69
CAS:	7080-50-4
EINECS:	204-854-7

A.G. (15950)

Appearance	white powder
Assay	min. 98,5 %
Insoluble matter in ethanol	max. 1,5 %

pure (15940)

Appearance	white powder
Assay	min. 97,0 %
Hazard Statements:	302, 314, 334
EUH Statements:	031
Precautionary Statements:	260, 280, 310, 305+351+338
Signal Word:	Danger
ADR/RID:	UN 3263 8 /C8 /III



Chloroacetic acid

Chemical formula:	ClCH ₂ COOH
Relative molecular weight:	94,5
CAS:	79-11-8
EINECS:	201-178-4

pure (19870)

Appearance	white crystalline substance
Assay	min. 98,0 %
Ash	max. 0,1 %
Melting point	61 - 64 °C

Hazard Statements:	331, 311, 301, 314, 400
EUH Statements:	
Precautionary Statements:	280, 273, 308+311
Signal Word:	Danger
ADR/RID:	UN 1751 6.1 /TC2 /II



C

Chlorobenzene

Chemical formula:	C ₆ H ₅ Cl
Relative molecular weight:	112,56
CAS:	108-90-7
EINECS:	203-628-5

A.G. (15980)

Appearance	clear colourless liquid
Assay	min. 99,5 %
Free acids (as CH ₃ COOH)	max. 0,03 %
Residue after evaporation	max. 0,003 %
Density (20 °C)	1,107 g/cm ³
Refractive index	1,523 - 1,525

pure (15970)

Appearance	clear colourless liquid
Assay	min. 99,0 %
Boiling point	131 - 133 °C
Density (20 °C)	1,107 g/cm ³
Refractive index	1,525
Flash point	-29 °C

Hazard Statements:	226, 315, 332, 411
EUH Statements:	
Precautionary Statements:	210, 261, 273
Signal Word:	Warning
ADR/RID:	UN 1134 3 /F1 /III



Chloroform stabilised with amylene

Chemical formula:	CHCl ₃
Relative molecular weight:	119,38
CAS:	67-66-3
EINECS:	200-663-8

A.G.

Appearance	clear colourless liquid
Assay	99,8 %
Residue after evaporation	0.001 %
Chloride (Cl ⁻)	0.0001 %
Free chlorine	0.0001 %
Free acids (as HCl)	0.001 %
Water	0.03 %
Refractive index	1.445 - 1.446
Density (20 °C)	1.488 - 1.494 g/cm ³

Hazard Statements:	351, 302, 372, 315, 319, 331, 361d
EUH Statements:	
Precautionary Statements:	261, 280, 305+351+338, 311
Signal Word:	Danger
ADR/RID:	UN 1888 6.1 /T1 /III



Chloroform stabilised with ethanol

Chemical formula:	CHCl ₃
Relative molecular weight:	119,38
CAS:	67-66-3
EINECS:	200-663-8

A.G. (17130)

Appearance	clear colourless liquid
Assay	min. 99,8 %
Water	max. 0,01 %
Residue after evaporation	max. 0,001 %
Free chlorine	max. 0,0001 %
Free acids (as HCl)	max. 0,002 %
Chloride (Cl ⁻)	max. 0,0001 %
Boiling point	59 - 62 °C
Density (20 °C)	1,476 - 1,481 g/cm ³
Refractive index	1,444
Stabilizer	ethanol ~ 1 %

99%+ (35130)

Appearance	clear colourless liquid
Assay	min. 99,0 %
Water	max. 0,01 %
Residue after evaporation	max. 0,001 %
Free chlorine	max. 0,0001 %
Free acids (as HCl)	max. 0,002 %
Chloride (Cl ⁻)	max. 0,0001 %
Stabilizer	ethanol ~ 1 %

pure (17110)

Appearance	clear colourless liquid
Assay	min. 99,0 %
Residue after evaporation	max. 0,002 %
Free acids (as HCl)	max. 0,002 %
Chloride (Cl ⁻)	max. 0,0002 %
Boiling point	59 - 62 °C
Density (20 °C)	1,474 - 1,478 g/cm ³
Refractive index	1,444
Stabilizer	ethanol ~ 1 %

Hazard Statements:	351, 302, 372, 315, 319, 331, 361d
EUH Statements:	
Precautionary Statements:	261, 280, 305+351+338, 311
Signal Word:	Danger
ADR/RID:	UN 1888 6.1 /T1 /III



Chromium(III) chloride hexahydrate

Chemical formula:	CrCl ₃ · 6 H ₂ O
Relative molecular weight:	266,45
CAS:	10060-12-5
EINECS:	233-038-3

A.G. (16340)

Appearance	dark green crystalline powder
Assay	min. 98,0 %
Sulfate (SO ₄ ²⁻)	max. 0,05 %
Ca (Calcium)	max. 0,03 %
Fe (Iron)	max. 0,01 %
Pb (Lead)	max. 0,005 %

Hazard Statements:	290, 302, 317, 411
EUH Statements:	
Precautionary Statements:	261, 280, 273, 302+352
Signal Word:	Warning
ADR/RID:	UN 3260 8 /C2 /III



Chromium(III) oxide

Chemical formula:	Cr ₂ O ₃
Relative molecular weight:	151,99
CAS:	1308-38-9
EINECS:	215-160-9

98%+ (34240)

Appearance	green powder
Assay	min. 98,0 %

Chromium(III) potassium sulfate dodecahydrate

Chemical formula:	CrK(SO ₄) ₂ · 12 H ₂ O
Relative molecular weight:	499,4
CAS:	7788-99-0
EINECS:	233-401-6

A.G. (25320)

Appearance	purple crystals
Assay	min. 98,5 %
Chloride (Cl ⁻)	max. 0,02 %
Fe (Iron)	max. 0,02 %
Pb (Lead)	max. 0,005 %

C

Chromosulfuric acid type A

Chemical formula:
Relative molecular weight:
CAS:
EINECS:

[See below \(19650\)](#)

Appearance	yellow-brown liquid
CrO ₃ content	0,32 ± 0,1 %
Density (20 °C)	1,840 ± 0,008 g/cm ³
Hazard Statements:	314, 350, 340, 360FD, 302, 412
EUH Statements:	208
Precautionary Statements:	201, 280, 305+351+338, 301+330+331, 308+311, 310
Signal Word:	Danger
ADR/RID:	UN 2240 8 /C1 /I



Chromosulfuric acid type S

Chemical formula:
Relative molecular weight:
CAS:
EINECS:

[See below \(19660\)](#)

Appearance	brown-orange liquid
CrO ₃ content	min. 2,0 %
Density (20 °C)	1,375 ± 0,005 g/cm ³
Hazard Statements:	314, 350, 340, 360FD, 373, 317, 334, 335, 331, 302, 312, 411
EUH Statements:	208
Precautionary Statements:	201, 273, 280, 305+351+338, 301+330+331, 308+311, 310
Signal Word:	Danger
ADR/RID:	UN 2240 8 /C1 /I



Citric acid anhydrous

Chemical formula:	HOC(COOH)(CH ₂ COOH) ₂
Relative molecular weight:	192,13
CAS:	77-92-9
EINECS:	201-069-1

[A.G. \(18790\)](#)

Appearance	white crystalline substance
Assay	min. 99,5 %
Loss on drying (110°C)	max. 0,5 %
Sulphated ash	max. 0,01 %
Insoluble matter in water	max. 0,005 %
Chloride (Cl ⁻)	max. 0,001 %
Sulfate (SO ₄ ²⁻)	max. 0,002 %
Oxalates	max. 0,1 %

[pure \(18780\)](#)

Appearance	white crystalline substance
Assay	min. 99.0%
Loss on drying (110°C)	max. 1.0 %
Sulphated ash	max. 0.05 %

Hazard Statements:	319, 335
EUH Statements:	
Precautionary Statements:	280, 305+351+338
Signal Word:	Danger
ADR/RID:	



Citric acid monohydrate

Chemical formula:	$\text{HOC}(\text{COOH})(\text{CH}_2\text{COOH})_2 \cdot \text{H}_2\text{O}$
Relative molecular weight:	210,14
CAS:	5949-29-1
EINECS:	201-069-1

A.G. (18830)

Appearance	white crystalline substance
Assay	min 99,5 %
Water	7,5 - 9,0 %
Insoluble matter in water	max. 0,005 %
Sulphated ash	max. 0,02 %
Chloride (Cl^-)	max. 0,001 %
Sulfate (SO_4^{2-})	max. 0,002 %
Oxalates	max. 0,1 %

tested acc. to Ph. Eur. (37570)

Appearance	white crystalline substance
Assay	min. 99,5 - 101,0 %
Water	7,5 - 9,0 %
Sulphated ash	max. 0,1 %
Oxalic acid	max. 0,035 %
Sulfate (SO_4^{2-})	max. 0,015 %
Al (Aluminum)	max. 0,00002 %
Heavy metals (as Pb)	max. 0,001 %

Hazard Statements:	319
EUH Statements:	
Precautionary Statements:	280, 305+351+338
Signal Word:	Warning
ADR/RID:	



Cobalt(II) chloride hexahydrate

Chemical formula:	$\text{CoCl}_2 \cdot 6 \text{H}_2\text{O}$
Relative molecular weight:	237,93
CAS:	7791-13-1
EINECS:	231-589-4

A.G. (16380)

Appearance	červenofialová krystalická látka
Assay	min. 99,0 %
Sulfate (SO_4^{2-})	max. 0,005 %
Insoluble matter in water	max. 0,01 %

pure (16370)

Appearance	reddish-purple crystalline substance
Assay	min. 98,0 %

Hazard Statements:	350i, 341, 360F, 302, 334, 317, 410
EUH Statements:	
Precautionary Statements:	201, 261, 273, 280, 308+313
Signal Word:	Danger
ADR/RID:	UN 3077 9 /M7 /III



Cobalt(II) nitrate hexahydrate

Chemical formula:	$\text{Co}(\text{NO}_3)_2 \cdot 6 \text{H}_2\text{O}$
Relative molecular weight:	291,03
CAS:	10026-22-9
EINECS:	233-402-1

A.G. (13070)

Appearance	reddish brown crystalline substance
Assay	min. 99,0 %
Insoluble matter in water	max. 0,01 %
Chloride (Cl^-)	max. 0,005 %
Sulfate (SO_4^{2-})	max. 0,01 %
Ni (Nickel)	max. 0,1 %

pure (13060)

Appearance	reddish brown crystalline substance
Assay	min. 98,0 %

Hazard Statements:	272, 360F, 350i, 341, 302, 334, 317, 410
EUH Statements:	
Precautionary Statements:	273, 280, 220
Signal Word:	Danger
ADR/RID:	UN 1477 5.1 /O2 /II



C

Cobalt(II) sulfate heptahydrate

Chemical formula:	CoSO ₄ · 7 H ₂ O
Relative molecular weight:	281,1
CAS:	10026-24-1
EINECS:	233-334-2

A.G. (25570)

Appearance	red-orange powder
Assay	min. 99,0 %
Insoluble matter in water	max. 0,005 %
Chloride (Cl ⁻)	max. 0,005 %
Fe (Iron)	max. 0,005 %
Pb (Lead)	max. 0,005 %

pure (25560)

Appearance	red-orange powder
Assay	min. 98,0 %
Chloride (Cl ⁻)	max. 0,05 %
Fe (Iron)	max. 0,05 %
Pb (Lead)	max. 0,05 %

Hazard Statements:	341, 360F, 350i, 302, 334, 317, 410
EUH Statements:	
Precautionary Statements:	201, 261, 273, 280, 308+313
Signal Word:	Danger
ADR/RID:	UN 3077 9 /M7 /III



Collodion ÖAB

Chemical formula:	
Relative molecular weight:	
CAS:	
EINECS:	

See below (70330)

Appearance	Slightly yellowish, clear syrupy
liquid, ether-like odor	
Relative density	0,750 - 0,770 g/cm ³
Identification A (burn test)	passes test
Identification B (shake test)	passes test
Free acid	passes test (neutral)
Nitrocellulose content	3,4 - 4,5 %

Hazard Statements:	224, 302, 336
EUH Statements:	019, 066
Precautionary Statements:	210, 243, 403+235
Signal Word:	Danger
ADR/RID:	UN 1263 3 /F1 /I



Complexone I (Nitriloacetic acid)

Chemical formula:	C ₆ H ₉ NO ₆
Relative molecular weight:	191,14
CAS:	139-13-9
EINECS:	205-355-7

A.G. (17990)

Appearance	white powder
Assay	min. 99,0 %
Loss on drying	max. 0,1 %
Sulphated ash	max. 0,1 %
Chloride (Cl ⁻)	max. 0,01 %
Fe (Iron)	max. 0,0005 %

Hazard Statements:	302, 319, 351
EUH Statements:	
Precautionary Statements:	281, 305+351+338
Signal Word:	Warning
ADR/RID:	



Complexone II (EDTA)

Chemical formula:	C ₁₀ H ₁₆ N ₂ O ₈
Relative molecular weight:	292,25
CAS:	60-00-4
EINECS:	200-449-4

A.G. (18010)

Appearance	white powder
Assay	min. 99,0 %
Sulphated ash	max. 0,2 %
Fe (Iron)	max. 0,005 %
Ca (Calcium)	max. 0,003 %
Mg (Magnesium)	max. 0,0005 %
Heavy metals (as Pb)	max. 0,001 %

Hazard Statements:	319
EUH Statements:	
Precautionary Statements:	280, 305+351+338
Signal Word:	Warning
ADR/RID:	



Complexone III (EDTA-Na₂)

Chemical formula:	C ₁₀ H ₁₄ N ₂ Na ₂ O ₈ · 2 H ₂ O
Relative molecular weight:	372,24
CAS:	6381-92-6
EINECS:	205-358-3

A.G. (18080)

Appearance	white powder
Assay	99 - 100,5 %
Insoluble matter in water	max. 0,005 %
pH (5% water solution)	4,0 - 5,0
Fe (Iron)	max. 0,002 %
Cu (Copper)	max. 0,001 %

pure (18070)

Appearance	white powder
Assay	min. 98,0 %
Insoluble matter in water	max. 0,02 %
pH (5% water solution)	4,0 - 5,0

Hazard Statements:	332, 373
EUH Statements:	
Precautionary Statements:	260, 314
Signal Word:	Warning
ADR/RID:	



Complexone IV

Chemical formula:	C ₁₄ H ₂₂ N ₂ O ₈ · H ₂ O
Relative molecular weight:	364,35
CAS:	125572-95-4
EINECS:	236-308-9

A.G. (18090)

Appearance	white powder
Assay	min. 99,0 %
Sulphated ash	max. 0,1 %
Fe (Iron)	max. 0,001 %
Chloride (Cl ⁻)	max. 0,005 %
Sulfate (SO ₄ ²⁻)	max. 0,01 %
Heavy metals (as Pb)	max. 0,0005 %

pure (30280)

Appearance	white powder
Assay	min. 98,0 %
Ash	max. 0,3 %
Melting point	213 - 216 °C

Hazard Statements:	319, 315, 335
EUH Statements:	
Precautionary Statements:	261, 305+351+338
Signal Word:	Warning
ADR/RID:	



C

Copper (II) oxide

Chemical formula:	CuO
Relative molecular weight:	79,54
CAS:	1317-38-0
EINECS:	215-269-1

[A.G. \(30380\)](#)

Appearance	black powder
Assay	min. 99,0 %
Total S (as SO ₄ ²⁻)	max. 0,01 %
Total nitrogen (as N)	max. 0,002 %
Insoluble matter in HCl	max. 0,02 %
Substance not precipitated by H ₂ S (as SO ₄ ²⁻)	max. 0,2 %
Chloride (Cl ⁻)	max. 0,005 %
Fe (Iron)	max. 0,05 %
Heavy metals (as Pb)	max. 0,05 %

[pure \(23330\)](#)

Appearance	black powder
Assay	min. 97,0 %
Hazard Statements:	410
EUH Statements:	
Precautionary Statements:	273
Signal Word:	Warning
ADR/RID:	UN 3077 9 /M7 /III



Copper powder

Chemical formula:	Cu
Relative molecular weight:	63,55
CAS:	7440-50-8
EINECS:	231-159-6

[A.G.](#)

Appearance	red to reddish brown powder
Assay	min. 99,0%
Zn (Zinc)	max. 0.01%
Pb (Lead)	max. 0.05%

[pure \(21070\)](#)

Appearance	red to reddish brown powder
Assay	min. 98,0%

Hazard Statements:	228, 410
EUH Statements:	
Precautionary Statements:	210, 273
Signal Word:	Danger
ADR/RID:	UN 3089 4.1 /F3 /II



Copper sulfate anhydrous

Chemical formula:	CuSO ₄
Relative molecular weight:	159,6
CAS:	7758-98-7
EINECS:	231-847-6

[A.G. \(25640\)](#)

Appearance	white to light grey powder
Assay	min. 99,0 %
Total nitrogen (as N)	max. 0,005 %
Loss on drying (250°C)	max. 1,0 %
Chloride (Cl ⁻)	max. 0,005 %
Fe (Iron)	max. 0,01 %
Pb (Lead)	max. 0,005 %

[pure \(30400\)](#)

Appearance	white to light grey powder
Assay	min. 99,0 %
Loss on drying (250°C)	max. 2,0 %
Hazard Statements:	302, 319, 315, 410
EUH Statements:	
Precautionary Statements:	273, 302+352, 305+351+338
Signal Word:	Warning
ADR/RID:	UN 3077 9 /M7 /III



Copper sulfate pentahydrate

Chemical formula:	CuSO ₄ · 5 H ₂ O
Relative molecular weight:	249,68
CAS:	7758-99-8
EINECS:	231-847-6

A.G. (25660)

Appearance	blue crystals
Assay	min. 99,0 %
Total nitrogen (as N)	max. 0,001 %
pH (5% water solution)	3,5 - 4,5
Chloride (Cl ⁻)	max. 0,001 %
Fe (Iron)	max. 0,01 %
Pb (Lead)	max. 0,002 %

pure (25650)

Appearance	blue crystals
Assay	min. 98,0 %
Hazard Statements:	302, 318, 315, 410
EUH Statements:	
Precautionary Statements:	273, 302+352, 305+351+338
Signal Word:	Danger
ADR/RID:	UN 3077 9 /M7 /III



Copper(I) chloride

Chemical formula:	CuCl
Relative molecular weight:	98,99
CAS:	7758-89-6
EINECS:	231-842-9

A.G. (16500)

Appearance	greyish powder
Assay	min. 97,0 %
Sulfate (SO ₄ ²⁻)	max. 0,05 %
Fe (Iron)	max. 0,005 %
Pb (Lead)	max. 0,01 %

pure (16490)

Appearance	greyish powder
Assay	min. 97,0 %
Hazard Statements:	302, 410
EUH Statements:	
Precautionary Statements:	273
Signal Word:	Warning
ADR/RID:	UN 2802 8 /C2 /III



Copper(II) acetate monohydrate

Chemical formula:	(CH ₃ COO) ₂ Cu · H ₂ O
Relative molecular weight:	199,65
CAS:	6046-93-1
EINECS:	205-553-3

A.G. (22620)

Appearance	blue-green crystals
Assay	min. 99,0 %
Chloride (Cl ⁻)	max. 0,005 %
Sulfate (SO ₄ ²⁻)	max. 0,15 %
Fe (Iron)	max. 0,005 %
Zn (Zinc)	max. 0,01 %
Pb (Lead)	max. 0,002 %

pure (22610)

Appearance	blue-green crystals
Assay	min. 98,0 %
Chloride (Cl ⁻)	max. 0,005 %
Sulfate (SO ₄ ²⁻)	max. 0,15 %
Fe (Iron)	max. 0,005 %
Pb (Lead)	max. 0,005 %

ACS (48320)

Appearance	blue-green crystals
Assay	min. 98,0 - 102,0 %
Insoluble matter	max. 0,01 %
Sulfate (SO ₄ ²⁻)	max. 0,01 %
Ca (Calcium)	max. 0,005 %
Fe (Iron)	max. 0,002 %
Ni (Nickel)	max. 0,01 %
K (Potassium)	max. 0,01 %
Na (Sodium)	max. 0,05 %

Hazard Statements:	302, 319, 335, 315, 400
EUH Statements:	
Precautionary Statements:	261, 273, 305+351+338
Signal Word:	Warning
ADR/RID:	UN 3077 9 /M7 /III



C

Copper(II) carbonate basic

Chemical formula:	$\text{CuCO}_3 \cdot \text{Cu(OH)}_2$
Relative molecular weight:	221,1
CAS:	12069-69-1
EINECS:	235-113-6

A.G. (42130)

Appearance	blue-green powder
Assay	min. 95,0 %
Loss on drying	max. 4,0 %

pure (27930)

Appearance	blue-green powder
Assay	min. 92,0 %
Loss on drying	max. 4,0 %

Hazard Statements:	302, 315, 319, 335
EUH Statements:	
Precautionary Statements:	261, 305+351+338
Signal Word:	Warning
ADR/RID:	



Copper(II) chloride dihydrate

Chemical formula:	$\text{CuCl}_2 \cdot 2 \text{H}_2\text{O}$
Relative molecular weight:	170,48
CAS:	10125-13-0
EINECS:	231-210-2

A.G. (16470)

Appearance	greenish blue crystalline powder
Assay	min. 99,0 %
Sulfate (SO_4^{2-})	max. 0,005 %
Fe (Iron)	max. 0,005 %
Pb (Lead), Ni (Nickel)	max. 0,005 %
pH (5% water solution)	3,0 - 3,8

pure (16460)

Appearance	greenish blue crystalline powder
Assay	min. 97,5 %

Hazard Statements:	290, 302, 312, 315, 318, 335, 400, 411
EUH Statements:	
Precautionary Statements:	261, 273, 280, 305+351+338
Signal Word:	Warning
ADR/RID:	UN 2802 8 /C2 /III



Copper(II) nitrate trihydrate

Chemical formula:	$\text{Cu(NO}_3)_2 \cdot 3 \text{H}_2\text{O}$
Relative molecular weight:	241,6
CAS:	10031-43-3
EINECS:	221-838-5

A.G. (13130)

Appearance	blue crystalline substance
Assay	min. 99,0 - 104,0 %
Insoluble matter in water	max. 0,01 %
Chloride (Cl^-)	max. 0,005 %
Sulfate (SO_4^{2-})	max. 0,005 %
Fe (Iron)	max. 0,005 %
Pb (Lead)	max. 0,005 %
Ni (Nickel)	max. 0,005 %

pure (13120)

Appearance	blue crystalline substance
Assay	min. 98,0 %

Hazard Statements:	272, 302, 315, 318, 400
EUH Statements:	
Precautionary Statements:	220, 273, 280, 305+351+338
Signal Word:	Danger
ADR/RID:	UN 1477 5.1 /O2 /II



m-Cresol

Chemical formula:	C ₇ H ₈ O
Relative molecular weight:	108,14
CAS:	1008-39-4
EINECS:	203-577-9

A.G. (21380)

Appearance	dark orange liquid
Assay	min. 99,0 %
Boiling point	200 - 203 °C
Density (20 °C)	1,034 g/cm ³
Refractive index	1,542
Flash point	86 °C

pure (21390)

Appearance	dark orange liquid
Assay	min. 98,0 %
Boiling point	200 - 205 °C
Density (20 °C)	1,034 g/cm ³
Refractive index	1,541
Flash point	86 °C
Hazard Statements:	301, 311, 314
EUH Statements:	
Precautionary Statements:	301+310, 305+351+338, 280
Signal Word:	Danger
ADR/RID:	UN 2076 6.1 /TC1 /II



o-Cresol

Chemical formula:	C ₇ H ₈ O
Relative molecular weight:	108,14
CAS:	95-48-7
EINECS:	202-423-8

A.G. (30790)

Appearance	yellow-brown crystalline substance
Assay	min. 99,0 %
Melting point	28 - 31 °C
Residue after evaporation	max. 0,05 %
Water	max. 0,2 %
Flash point	81 °C

pure (22860)

Appearance	yellow-brown crystalline substance
Assay	min. 98,0 %
Melting point	28 - 31 °C
Flash point	81 °C
Hazard Statements:	301, 311, 314
EUH Statements:	
Precautionary Statements:	301+310, 305+351+338, 280
Signal Word:	Danger
ADR/RID:	UN 3455 6.1 /TC2 /II



p-Cresol

Chemical formula:	C ₇ H ₈ O
Relative molecular weight:	108,14
CAS:	106-44-5
EINECS:	203-398-6

A.G. (30810)

Appearance	white crystalline substance
Assay	min. 99,0 %
Melting point	32 - 35 °C
Flash point	85 °C

pure (30800)

Appearance	white crystalline substance
Assay	min. 98,0 %
Melting point	32 - 35 °C
Flash point	85 °C
Hazard Statements:	301, 311, 314
EUH Statements:	
Precautionary Statements:	301+310, 305+351+338, 280
Signal Word:	Danger
ADR/RID:	UN 3455 6.1 /TC2 /II



C

Cupral

Chemical formula:	$C_5H_{10}NNaS_2 \cdot 3 H_2O$
Relative molecular weight:	225,31
CAS:	20624-25-3
EINECS:	205-710-6

A.G. (18270)

Appearance	white crystalline substance
Assay	min. 99,0 %
Fe (Iron)	max. 0,0005 %
Heavy metals (as Pb)	max. 0,0005 %

Hazard Statements: 302, 315, 318

EUH Statements:

Precautionary Statements: 280, 305+351+338

Signal Word: Danger

ADR/RID:



Cyclohexane

Chemical formula:	C_6H_{12}
Relative molecular weight:	84,16
CAS:	110-82-7
EINECS:	203-806-2

A.G. (11580)

Appearance	clear colourless liquid
Assay	min. 99,5 %
Water	max. 0,02 %
Residue after evaporation	max. 0,002 %
Free acids (as CH_3COOH)	max. 0,001 %
Total aromatics	max. 0,1 %
Melting point	6 - 7 °C
Boiling point	80 - 81 °C
Density (20 °C)	0,778 g/cm ³
Refractive index	1,426
Flash point	-18 °C

pure (11560)

Appearance	clear colourless liquid
Assay	min. 99,0 %
Melting point	4 - 7 °C
Boiling point	79 - 81 °C
Density (20 °C)	0,777 g/cm ³
Refractive index	1,426
Flash point	-18 °C

ACS (43450)

Appearance	clear colourless liquid
Assay	min. 99,0 %
Color scale (APHA)	max. 10
Residue after evaporation	max. 0,002 %
Water	max. 0,02 %
Substances darkened by H_2SO_4	passes test
Density (20 °C)	0,778 g/cm ³
Refractive index	1,426

for HPLC (11570)

Assay	min. 99,8 %
Residue after evaporation	max. 0,0005 %
Water	max. 0,01 %
UV absorption at 210 nm	max. 1,00
UV absorption at 220 nm	max. 0,50
UV absorption at 230 nm	max. 0,20
UV absorption at 240 nm	max. 0,08
UV absorption at 250 nm	max. 0,03
UV absorption at 255 nm	max. 0,01
Appearance	clear colourless liquid

Hazard Statements:

225, 304, 315, 336, 410

EUH Statements:

Precautionary Statements:

210, 243, 273, 301+310, 331

Signal Word:

Danger

ADR/RID:

UN 1145 3 /F1 /II



Cyclohexanol

Chemical formula:	C ₆ H ₁₂ O
Relative molecular weight:	100,16
CAS:	108-93-0
EINECS:	203-630-6

A.G. (11610)

Appearance	clear colourless liquid
Assay	min. 99,0 %
Cyclohexanone	max. 0,5 %
Melting point	22 - 26 °C
Boiling point	160 - 161 °C
Density (25 °C)	0.962 g/cm ³
Refractive index	1,463 - 1,468

pure (11600)

Appearance	clear colourless liquid
Assay	min. 98,0 %
Cyclohexanone	max. 1,0 %
Melting point	18 - 26 °C
Density (25 °C)	0.962 g/cm ³

Hazard Statements:	332, 302, 315, 335
EUH Statements:	
Precautionary Statements:	261, 302+352, 304+340
Signal Word:	Warning
ADR/RID:	



Cyclohexanone

Chemical formula:	C ₆ H ₁₀ O
Relative molecular weight:	98,15
CAS:	108-94-1
EINECS:	203-631-1

A.G. (11630)

Appearance	clear colourless liquid
Assay	min. 99,5 %
Residue after evaporation	max. 0,05 %
Fe (Iron)	max. 0,0001 %
Density (20 °C)	0,947 g/cm ³
Refractive index	1,450
Flash point	44 °C

pure (11620)

Appearance	clear colourless liquid
Assay	min. 99,0 %
Density (20 °C)	0,947 g/cm ³
Refractive index	1,450
Flash point	44 °C

ACS (43170)

Appearance	clear colourless liquid
Assay	min. 99,0 %
Color scale (APHA)	max. 10
Residue after evaporation	max. 0,05 %
Water	max. 0,05 %
Density (20 °C)	0,947 g/cm ³
Refractive index	1,450

Hazard Statements:	226, 332, 312, 302, 315, 318
EUH Statements:	
Precautionary Statements:	210, 260, 280, 305+351+338
Signal Word:	Danger
ADR/RID:	UN 1915 3 /F1 /III



D

Di-ammonium hydrogenphosphate

Chemical formula:	(NH ₄) ₂ HPO ₄
Relative molecular weight:	132,06
CAS:	7783-28-0
EINECS:	231-987-8

A.G. (15060)

Appearance	white crystalline substance
Assay	min. 99,0 %
Chloride (Cl ⁻)	max. 0,001 %
Sulfate (SO ₄ ²⁻)	max. 0,002 %
Fe (Iron)	max. 0,001 %
Heavy metals (as Pb)	max. 0,001 %
pH (5% water solution)	7,8 - 8,5
Appearance of solution	clear, colourless

pure (15050)

Appearance	white crystalline substance
Assay	min. 99,0 %

Hazard Statements: 319, 335, 315

EUH Statements:

Precautionary Statements: 261, 305+351+338

Signal Word: Warning

ADR/RID:



Dibutyl ether

Chemical formula:	[CH ₃ (CH ₂) ₃] ₂ O
Relative molecular weight:	130,23
CAS:	142-96-1
EINECS:	205-575-3

pure (12050)

Assay	min. 99,0 %
Boiling point	139 - 142 °C
Density (20 °C)	0,767 g/cm ³
Refractive index	1,399
Flash point	25 °C
Appearance	clear colourless liquid

Hazard Statements: 226, 315, 319, 335, 412

EUH Statements:

Precautionary Statements: 261, 273, 305+351+338

Signal Word: Warning

ADR/RID: UN 1149 3 /F1 /III



1,2-Dichloroethane

Chemical formula:	ClCH ₂ CH ₂ Cl
Relative molecular weight:	98,96
CAS:	107-06-2
EINECS:	203-458-1

A.G. (28840)

Appearance	clear colourless liquid
Assay	min. 99,0 %
Residue after evaporation	max. 0,002 %
Water	max. 0,05 %
Free acids (as HCl)	max. 0,001 %
Boiling point	82 - 84 °C
Density (20 °C)	1,253 g/cm ³
Refractive index	1,444
Flash point	13 °C

pure (28830)

Appearance	clear colourless liquid
Assay	min. 98,5 %
Residue after evaporation	max. 0,005 %
Boiling point	82 - 84 °C
Density (20 °C)	1,253 g/cm ³
Refractive index	1,445
Flash point	13 °C

See below (28820)

Appearance	clear colourless liquid
Assay	min. 99,8 %
Residue after evaporation	max. 0,005 %
Color scale (APHA)	max. 25
Infrared spectrometry	passes test
Refractive index	1,444 - 1,446
Free acids (as HCl)	max. 0,01 %
Water	max. 0,02 %

Hazard Statements: 225, 302, 331, 315, 319, 335, 350

EUH Statements:

Precautionary Statements: 201, 210, 304+340, 305+351+338, 308+313

Signal Word: Danger

ADR/RID: UN 1184 3 /FT1 /II



Diethanolamine

Chemical formula:	HN(CH ₂ CH ₂ OH) ₂
Relative molecular weight:	105,14
CAS:	111-42-2
EINECS:	203-868-0

A.G. (12090)

Appearance	clear colourless liquid
Assay	min. 99,0 %
Water	max. 0,15 %
Density (20 °C)	1,097 g/cm ³
Refractive index	1,477

pure (12080)

Assay	~ 98,0 %
Appearance	clear colourless liquid
Water	max. 0,6 %
Melting point	28 °C
Aminoethanol	max. 3,0 %

ACS (43500)

Appearance	clear colourless liquid
Assay	min. 98,5 %
Apparent equivalent weight	104,0 - 106,0
Color scale (APHA)	max. 15
Residue on ignition	max. 0,005 %
2-Aminoethanol	max. 1,0 %
Triethanolamine	max. 1,0 %
Water	max. 0,15 %

Hazard Statements:	302, 373, 315, 318, 361fd, 412
EUH Statements:	
Precautionary Statements:	280, 273, 305+351+338, 308+313
Signal Word:	Danger
ADR/RID:	



Diethylamine

Chemical formula:	(C ₂ H ₅) ₂ NH
Relative molecular weight:	73,14
CAS:	109-89-7
EINECS:	203-716-3

A.G. (12110)

Appearance	clear colourless liquid
Assay	min. 99,5 %
Water	max. 0,3 %
Density (20 °C)	0,704 g/cm ³
Refractive index	1,386

pure (12100)

Appearance	clear colourless liquid
Assay	min. 99,0 %
Boiling point	55 - 57 °C
Density (20 °C)	0,704 g/cm ³
Refractive index	1,386
Flash point	-36 °C

Hazard Statements:	225, 314, 302, 311, 332, 335
EUH Statements:	
Precautionary Statements:	210, 233, 280, 305+351+338,
	303+361+353, 403+235
Signal Word:	Danger
ADR/RID:	UN 1154 3 /FC /II



Diethylene glycol

Chemical formula:	(HOCH ₂ CH ₂) ₂ O
Relative molecular weight:	106,12
CAS:	111-46-6
EINECS:	203-872-2

A.G. (12140)

Appearance	clear colourless liquid
Assay	min. 99,0 %
Water	max. 0,5 %
Boiling point	242 - 247 °C
Density (20 °C)	1,118 g/cm ³
Refractive index	1,446
Free acids (as CH ₃ COOH)	max. 0,01 %

pure (12130)

Appearance	clear colourless liquid
Assay	min. 98,0 %
Boiling point	242 - 247 °C
Density (20 °C)	1,118 g/cm ³
Refractive index	1,447

Hazard Statements:	302, 373
EUH Statements:	
Precautionary Statements:	260, 301+312
Signal Word:	Warning
ADR/RID:	



D

Diethylether

Chemical formula:	(C ₂ H ₅) ₂ O
Relative molecular weight:	74,12
CAS:	60-29-7
EINECS:	200-467-2

A.G. (12180)

Appearance	clear colourless liquid
Assay	min. 99,7 %
Residue after evaporation	max. 0,001 %
Water	max. 0,15 %
Free acids (as CH ₃ COOH)	max. 0,0002 %
Ethanol	max. 0,1 %
Methanol	max. 0,02 %
Peroxides	max. 0,0004 %
Stabilizer	BHT 5 - 7 ppm
Density (20 °C)	0,7135 - 0,7145 g/cm ³
Flash point	-40 °C

Hazard Statements:	224, 302, 336
EUH Statements:	019
Precautionary Statements:	210, 243, 403+235
Signal Word:	Danger
ADR/RID:	UN 1155 3 /F1 /I



Dichloromethane

Chemical formula:	CH ₂ Cl ₂
Relative molecular weight:	84,93
CAS:	75-09-2
EINECS:	200-838-9

A.G. (12380)

Appearance	clear liquid
Assay	min. 99,5 %
Residue after evaporation	max. 0,001 %
Water	max. 0,02 %
Free acids (as HCl)	max. 0,001 %
Boiling point	40 °C
Density (20 °C)	1,325 g/cm ³
Refractive index	1,424
Stabilizer	Amylen 20 - 60 ppm

pure (12360)

Appearance	clear liquid
Assay	min. 99,0 %
Water	max. 0,05 %
Free acids (as HCl)	max. 0,002 %
Boiling point	37 - 40 °C
Density (20 °C)	1,325 g/cm ³
Refractive index	1,424
Stabilizer	Amylen 20 - 60 ppm

ACS (43400)

Appearance	clear liquid
Color scale (APHA)	max. 10
Assay (GC)	min. 99,5 %
Water	max. 0,02 %
Residue after evaporation	max. 0,002 %
Free halogens	passes test
Free acids	max. 0,0003 meq/g
Density (20 °C)	1,325 g/cm ³
Refractive index	1,424
Stabilizer	Amylen 20 - 60 ppm

Hazard Statements:	351, 315, 319, 335, 336, 373
EUH Statements:	
Precautionary Statements:	201, 261, 280, 305+351+338, 308+313
Signal Word:	Warning
ADR/RID:	UN 1593 6.1 /T1 /III



N,N'-Diisopropylcarbodiimide

Chemical formula:	C ₇ H ₁₄ N ₂
Relative molecular weight:	126,2
CAS:	693-13-0
EINECS:	211-743-7

See below

Appearance	clear colourless to yellowish liquid
Factor	0,98 - 1,02
Assay (GC)	min. 99,0 %
Density (20 °C)	0,813 - 0,815 g/cm ³
Infrared spectrometry	passes test

Hazard Statements:	226, 315, 317, 318, 330, 334, 335, 410
EUH Statements:	
Precautionary Statements:	210, 280, 304+340, 303+361+353, 332+313, 308+310

Signal Word:	Danger
ADR/RID:	UN 3384 6.1 /TF1 /I



N,N-Dimethylacetamide

Chemical formula:	CH ₃ CON(CH ₃) ₂
Relative molecular weight:	87,12
CAS:	127-19-5
EINECS:	204-826-4

A.G. (21970)

Appearance	clear colourless liquid
Assay (GC)	min. 99,5 %
Residue after evaporation	max. 0,005 %
Density (25 °C)	0,937 g/cm ³
Refractive index	1,437 - 1,439
Water	max. 0,1 %

pure (21960)

Appearance	clear colourless liquid
Assay (GC)	min. 98,0 %
Refractive index	1,437 - 1,439

Hazard Statements: 360D, 312, 332, 219

EUH Statements:

Precautionary Statements: 201, 280, 308+313, 305+351+338

Signal Word: Danger

ADR/RID:



N,N-Dimethylaniline

Chemical formula:	C ₆ H ₅ N(CH ₃) ₂
Relative molecular weight:	121,18
CAS:	121-69-7
EINECS:	204-493-5

pure (21990)

Appearance	yellowish liquid
Assay	min. 99,0 %
Melting point	2 - 4 °C
Boiling point	74 - 76 °C
Density (20 °C)	0,956 g/cm ³
Refractive index	1,557 - 1,559

Hazard Statements: 351, 301, 311, 331, 411

EUH Statements:

Precautionary Statements: 261, 273, 280, 311

Signal Word: Danger

ADR/RID: UN 2253 6.1 /T1 /II



N,N-Dimethylformamide

Chemical formula:	HCON(CH ₃) ₂
Relative molecular weight:	73,1
CAS:	68-12-2
EINECS:	200-679-5

A.G. (22010)

Appearance	clear colourless liquid
Assay	min. 99,5 %
Residue after evaporation	max. 0,005 %
Water	max. 0,15 %
Boiling point	152 - 154 °C
Density (20 °C)	0,948 g/cm ³
Refractive index	1,430

pure (22000)

Appearance	clear colourless liquid
Assay	min. 99,0 %
Density (20 °C)	0,948 g/cm ³
Refractive index	1,431

Hazard Statements: 226, 360D, 332, 312, 319

EUH Statements:

Precautionary Statements: 201, 210, 280, 305+351+338, 308+313

Signal Word: Danger

ADR/RID: UN 2265 3 /F1 /III



D

4-Dimethylaminobenzaldehyde

Chemical formula:	C ₉ H ₁₁ NO
Relative molecular weight:	149,19
CAS:	100-10-7
EINECS:	202-819-0

A.G. (29410)

Appearance	grey-green powder
Assay	min. 99,0 %
Melting point	73 - 75 °C
Sulphated ash	max. 0,1 %
Heavy metals (as Pb)	max. 0,001 %
Fe (Iron)	max. 0,001 %

N,N-Dimethyl-*p*-phenylenediamine

Chemical formula:	C ₈ H ₁₂ N ₂
Relative molecular weight:	136,2
CAS:	99-98-9
EINECS:	202-807-5

pure (34960)

Appearance	light brown substance
Assay	min. 98,0 %
Melting point	36 - 38 °C
Boiling point	136 °C
Hazard Statements:	331, 311, 301
EUH Statements:	
Precautionary Statements:	261, 280, 301+310, 304+340, 311
Signal Word:	Danger
ADR/RID:	UN 2810 6.1 /T2 /III



Dimethyl sulfate

Chemical formula:	(CH ₃ O) ₂ SO ₂
Relative molecular weight:	126,13
CAS:	77-78-1
EINECS:	201-058-1

A.G. (12610)

Assay	min. 99,0 %
Ash	max. 0,02 %
Boiling point	188 °C
Density (20 °C)	1,325 g/cm ³
Refractive index	1,387
Appearance	clear colourless liquid
Hazard Statements:	350, 341, 330, 301, 314, 317
EUH Statements:	
Precautionary Statements:	201, 280, 301+330+331, 304+340, 305+351+338, 308+313
Signal Word:	Danger
ADR/RID:	UN 1595 6.1 /TC1 /I



Dimethyl sulfoxide

Chemical formula:	(CH ₃) ₂ SO
Relative molecular weight:	78,13
CAS:	67-68-5
EINECS:	200-664-3

A.G. (12640)

Appearance	clear colourless liquid
Assay	min. 99,0 %
Free acid	max. 0.001 meq/g
Residue after evaporation	max. 0,005 %
Water	max. 0,3 %
Melting point	18 - 20 °C
Boiling point	189 °C
Density (20 °C)	1,100 g/cm ³
Refractive index	1,479

pure (12630)

Appearance	clear colourless liquid
Assay	min. 98,0 %
Water	max. 0,3 %
Melting point	16 - 19 °C
Density (20 °C)	1,100 g/cm ³
Refractive index	1,479

Dimethylglyoxime

Chemical formula:	C ₄ H ₈ N ₂ O ₂
Relative molecular weight:	116,12
CAS:	95-45-4
EINECS:	202-420-1

A.G. (12590)

Appearance	off-white powder
Assay	min. 99,0 %
Sulphated ash	max. 0,05 %
Insoluble matter in ethanol	max. 0,02 %
Melting point	241 - 242 °C

Hazard Statements:	228
EUH Statements:	
Precautionary Statements:	210, 370+378
Signal Word:	Warning
ADR/RID:	UN 1325 4.1 /F1 /III



3,5-Dinitrobenzoic acid

Chemical formula:	C ₇ H ₄ N ₂ O ₆
Relative molecular weight:	212,12
CAS:	99-34-3
EINECS:	202-751-1

pure (18420)

Appearance	yellowish powder
Assay	min. 98,0 %
Melting point	204 - 208 °C
Hazard Statements:	228, 302, 315, 319
EUH Statements:	
Precautionary Statements:	210, 264, 280, 337+313, 370+378
Signal Word:	Warning
ADR/RID:	



D

1,4-Dioxane

Chemical formula:	C ₄ H ₈ O ₂
Relative molecular weight:	88,11
CAS:	123-91-1
EINECS:	204-661-8

A.G. (12660)

Appearance	clear colourless liquid
Assay	min. 99,5 %
Water	max. 0,05 %
Residue after evaporation	max. 0,001 %
Free acids (as CH ₃ COOH)	max. 0,001 %
Melting point	11 - 12 °C
Boiling point	~ 100 - 102 °C
Density (20 °C)	1,034 g/cm ³
Refractive index	1,422
Flash point	11 °C

pure (12650)

Appearance	clear colourless liquid
Assay	min. 99,0 %
Residue after evaporation	max. 0,003 %
Free acids (as CH ₃ COOH)	max. 0,01 %
Melting point	11 - 12 °C
Density (20 °C)	1,033 g/cm ³
Flash point	11 °C

Hazard Statements:	225, 350, 319, 335
EUH Statements:	019, 066
Precautionary Statements:	210, 261, 280, 305+351+338, 310
Signal Word:	Danger
ADR/RID:	UN 1165 3 /F1 /II



Diphenylamine

Chemical formula:	(C ₆ H ₅) ₂ NH
Relative molecular weight:	169,23
CAS:	122-39-4
EINECS:	204-539-4

A.G. (12220)

Appearance	white crystalline substance
Assay	min. 99,0 %
Melting point	52 - 54 °C
Sulphated ash	max. 0,05 %
Insoluble matter in ethanol	max. 0,01 %
Fe (Iron)	max. 0,001 %

pure (12210)

Appearance	white crystalline substance
Assay	min. 98,0 %
Melting point	50 - 53 °C

Hazard Statements:	331, 311, 301, 373, 410
EUH Statements:	
Precautionary Statements:	261, 280, 310, 273
Signal Word:	Danger
ADR/RID:	UN 3077 9 /M7 /III



1,5-Diphenylcarbazine

Chemical formula:	C ₆ H ₅ NHNHCONHNHC ₆ H ₅
Relative molecular weight:	242,28
CAS:	140-22-7
EINECS:	205-403-7

A.G. (28940)

Appearance	almost white powder
Assay	min. 98,0 %
Melting point	170 - 175 °C
Sulphated ash	max. 0,05 %

Hazard Statements:	319, 315, 335
EUH Statements:	
Precautionary Statements:	261, 280, 305+351+338
Signal Word:	Warning
ADR/RID:	



Diphenylcarbazone

Chemical formula:	C ₆ H ₅ NNHCON:NC ₆ H ₅
Relative molecular weight:	240,27
CAS:	538-62-5
EINECS:	208-698-0

A.G. (31420)

Appearance	orange powder
Assay	min. 97,0 %
Melting point	119 - 123 °C
Sulphated ash	max. 0,1 %
Diphenylcarbazide	max. 1,0 %

Di-potassium hydrogenphosphate anhydrous

Chemical formula:	K ₂ HPO ₄
Relative molecular weight:	174,18
CAS:	7758-11-4
EINECS:	231-834-5

A.G. (15070)

Appearance	white crystalline substance
Assay	min. 99,0 %
Loss on drying	max. 1,0 %
Chloride (Cl ⁻)	max. 0,005 %
Sulfate (SO ₄ ²⁻)	max. 0,01 %
Fe (Iron)	max. 0,001 %
Heavy metals (as Pb)	max. 0,001 %
pH (5% water solution)	8,5 - 9,5
Appearance of solution (5% in water)	clear, colourless

pure (15080)

Appearance	white crystalline substance
Assay	min. 99,0 %

Di-potassium hydrogenphosphate trihydrate

Chemical formula:	K ₂ HPO ₄ · 3 H ₂ O
Relative molecular weight:	228,22
CAS:	16788-57-1
EINECS:	231-834-5

A.G. (15090)

Appearance	white crystalline substance
Assay	min. 99,0 %
Chloride (Cl ⁻)	max. 0,005 %
Sulfate (SO ₄ ²⁻)	max. 0,01 %
Fe (Iron)	max. 0,001 %
Heavy metals (as Pb)	max. 0,001 %
pH (5% water solution, 25 °C)	9,0 - 9,5
Appearance of solution (10% in water)	clear, colourless

D

Di-sodium hydrogenphosphate dihydrate

Chemical formula:	Na ₂ HPO ₄ · 2 H ₂ O
Relative molecular weight:	177,99
CAS:	10028-24-7
EINECS:	231-448-7

A.G. (15130)

Appearance	white crystalline substance
Assay (dried substance)	min. 99.0 %
Chloride (Cl ⁻)	max. 0,001 %
Sulfate (SO ₄ ²⁻)	max. 0,005 %
Fe (Iron)	max. 0,001 %
pH (5% water solution, 25 °C)	8,9 - 9,2
Appearance of solution (10% in water)	clear, colourless
Loss on drying	19,5 - 21,5 %

pure (15120)

Appearance	white crystalline substance
Assay (dried substance)	min. 99.0 %

Di-sodium hydrogenphosphate dodecahydrate

Chemical formula:	Na ₂ HPO ₄ · 12 H ₂ O
Relative molecular weight:	358,14
CAS:	10039-32-4
EINECS:	231-448-7

A.G. (15150)

Appearance	white crystalline substance
Assay	min. 99,0 %
Chloride (Cl ⁻)	max. 0,0005 %
Sulfate (SO ₄ ²⁻)	max. 0,01 %
Fe (Iron)	max. 0,0005 %
pH (5% water solution, 25 °C)	9,0 - 9,3

pure (15140)

Appearance	white crystalline substance
Assay	min. 99,0 %

2,2'-Dipyridyl

Chemical formula:	C ₁₀ H ₈ N ₂
Relative molecular weight:	156,19
CAS:	366-18-7
EINECS:	206-674-4

A.G. (29050)

Assay	min. 99,0 %
Melting point	69 - 71 °C
Ash	max. 0,05 %
Appearance	white crystalline substance

Hazard Statements:	301, 312
EUH Statements:	
Precautionary Statements:	261, 301+310
Signal Word:	Danger
ADR/RID:	UN 2811 6.1 /T2 /III



Di-sodium tartrate dihydrate

Chemical formula:	$\text{Na}_2\text{C}_4\text{H}_4\text{O}_6 \cdot 2\text{H}_2\text{O}$
Relative molecular weight:	230,1
CAS:	6106-24-7
EINECS:	212-773-2

[A.G. \(28260\)](#)

Appearance	white crystalline substance
Assay	min. 99,0 %
Insoluble matter in water	max. 0,005 %
pH (5% water solution)	7,0 - 9,0
Chloride (Cl^-)	max. 0,005 %
Sulfate (SO_4^{2-})	max. 0,01 %
Fe (Iron)	max. 0,001 %
Heavy metals (as Pb)	max. 0,001 %

E

EDTA magnesium disodium salt tetrahydrate

Chemical formula: $C_{10}H_{12}N_2MgNa_2O_8 \cdot 4 H_2O$
 Relative molecular weight: 430,56
 CAS: 29932-54-5
 EINECS:

A.G. (18150)

Appearance: white crystalline substance
 Assay (dried substance): min. 99,5%
 Water: 10 - 20 %
 Identification: passes test

pure (18140)

Appearance: white crystalline substance
 Assay (dried substance): ~ 99,0 %
 Water: 10 - 20 %

EDTA tetrasodium salt hydrate

Chemical formula: $C_{10}H_{12}N_2Na_4O_8 \cdot aq$
 Relative molecular weight:
 CAS: 194494-31-1
 EINECS: 200-573-9

pure (18160)

Appearance: white crystalline substance
 Assay (as EDTA- $Na_4 \cdot 4 H_2O$; M 452,2): min. 99 %

Hazard Statements: 302, 318
 EUH Statements:
 Precautionary Statements: 280, 305+351+338
 Signal Word: Danger
 ADR/RID:



Epichlorohydrine

Chemical formula:
 Relative molecular weight:
 CAS: 106-89-8
 EINECS: 203-439-8

See below

Appearance: clear liquid
 Assay (GC): min. 99.0%
 Density (20 °C): 1,178 - 1,182 g/cm³
 Identification B (IR spectrum): passes test

Hazard Statements: 226, 301+311+331, 314, 317, 350
 EUH Statements:
 Precautionary Statements:

201, 210, 280, 301+330+331,
 302+352, 304+340, 305+351+338,
 308+311

Signal Word: Danger
 ADR/RID: UN 2023 6.1 /TF1 /II



Ethanol 70% (m/m)

Chemical formula:	C ₂ H ₅ OH
Relative molecular weight:	46,07
CAS:	64-17-5
EINECS:	200-578-6

A.G. (70392)

Appearance	clear colourless liquid
Water	29,0 - 31,0 %
Density (20 °C)	0,866 - 0,870 g/cm ³

Hazard Statements:	225, 319
EUH Statements:	
Precautionary Statements:	210, 233
Signal Word:	Danger
ADR/RID:	UN 1170 3 /F1 /II



Ethanol 96%

Chemical formula:	C ₂ H ₅ OH
Relative molecular weight:	46,07
CAS:	64-17-5
EINECS:	200-578-6

A.G. (70390)

Appearance	clear colourless liquid
Assay	min. 95,4 - 96,8 % (V/V)
Free acids (as CH ₃ COOH)	max. 0,004 %
Residue after evaporation	max. 0,002 %
Density (20 °C)	0,8042 - 0,8098 g/cm ³

for UV (70391)

Appearance	clear colourless liquid
Assay	~ 96,0 % (V/V)
Residue after evaporation	max. 0,001 %
Free acids	max. 0,0005 meq/g
Free alkali	max. 0,0002 meq/g
Color scale (APHA)	max. 10
Infrared spectrometry	passes test
Substances reducing KMnO ₄	passes test
Refractive index	1,36
UV absorption at 210 nm	max. 0,50
UV absorption at 220 nm	max. 0,25
UV absorption at 230 nm	max. 0,15
UV absorption at 240 nm	max. 0,05
UV absorption at 250 nm	max. 0,03
UV absorption at 270 nm	max. 0,005

tested acc. to Ph. Eur. (71430)

Appearance	clear colourless liquid
Identification A (relative density)	passes test
Identification B (IR spectrum)	passes test
Relative density	0,805 - 0,812
UV absorption at 240 nm	max. 0,40
UV absorption at 260 nm	max. 0,30
UV absorption at 340 nm	max. 0,10
Titration acid or base	max. 30 µg/ml (as CH ₃ COOH)
Volatile impurities	passes test
Residue after evaporation	max. 25 µg/ml

Hazard Statements:	319, 225
EUH Statements:	
Precautionary Statements:	210, 233
Signal Word:	Danger
ADR/RID:	UN 1170 3 /F1 /II



E

Ethanol absolute

Chemical formula:	C ₂ H ₅ OH
Relative molecular weight:	46,07
CAS:	64-17-5
EINECS:	200-578-6

A.G. (71250)

Appearance	clear colourless liquid
Assay	min. 99,8 %
Free acids (as CH ₃ COOH)	max. 0,004 %
Residue after evaporation	max. 0,002 %
Water	max. 0,2 %
Volatile impurities (GC)	max. 0,05 %
Substances reducing KMnO ₄ (as Oxygen)	max. 0,0005 %
Boiling point	78 - 79 °C
Density (20 °C)	0,789 - 0,792 g/cm ³

for UV (71380)

Appearance	clear colourless liquid
Assay	min. 99,8 %
Free acids (as CH ₃ COOH)	max. 0,004 %
Residue after evaporation	max. 0,002 %
Water	max. 0,2 %
Volatile impurities (GC)	max. 0,05 %
Substances reducing KMnO ₄ (as Oxygen)	max. 0,0005 %
Density (20 °C)	0,789 - 0,792 g/cm ³
Infrared spectrometry	passes test
UV absorption at 205 nm	max. 1,0
UV absorption at 210 nm	max. 0,65
UV absorption at 250 nm	max. 0,04
UV absorption at 300 nm	max. 0,01

Hazard Statements:	319, 225
EUH Statements:	
Precautionary Statements:	210, 233
Signal Word:	Danger
ADR/RID:	UN 1170 3 /F1 /II



Ethanol denatured (Euro denaturation)

Chemical formula:	C ₂ H ₅ OH
Relative molecular weight:	46,07
CAS:	64-17-5
EINECS:	200-578-6

See below (47320)

Appearance	clear colourless to yellowish liquid
Assay	min. 95,7 %
Residue after evaporation	max. 15,0 mg/le
Methanol	max. 2,4 g/le
Aldehyde	max. 100,0 mg/le
Higher alcohols	max. 150,0 mg/le
Nitrogenous bases	max. 2,0 mg/le

Hazard Statements:	225, 319
EUH Statements:	
Precautionary Statements:	210, 233
Signal Word:	Danger
ADR/RID:	UN 1170 3 /F1 /II



Ethanolamine

Chemical formula:	NH ₂ CH ₂ CH ₂ OH
Relative molecular weight:	61,08
CAS:	141-43-5
EINECS:	205-483-3

A.G. (13510)

Appearance	clear colourless liquid
Assay	min. 99,0 %
Sulphated ash	max. 0,05 %
Water	max. 0,2 %
Fe (Iron)	max. 0,0001 %
Heavy metals (as Pb)	max. 0,0001 %
Melting point	8 - 12 °C
Boiling point	170 - 171 °C
Density (20 °C)	1,016 g/cm ³
Refractive index	1,454

Hazard Statements:	332, 312, 302, 314
EUH Statements:	
Precautionary Statements:	280, 302+352, 305+351+338, 310
Signal Word:	Danger
ADR/RID:	UN 2491 8 /C7 /III



2-Ethoxyethanol

Chemical formula:	C ₂ H ₅ OCH ₂ CH ₂ OH
Relative molecular weight:	90,12
CAS:	110-80-5
EINECS:	230-804-1

pure (29190)

Appearance	clear colourless liquid
Assay	min. 99,0 %
Boiling point	134 - 137 °C
Density (20 °C)	0,931 g/cm ³
Refractive index	1,408
Flash point	42 °C

Hazard Statements:	226, 360FD, 331, 302,
EUH Statements:	
Precautionary Statements:	201, 280, 308+313
Signal Word:	Danger
ADR/RID:	UN 1171 3 /F1 /III



Ethyl acetate

Chemical formula:	CH ₃ COOC ₂ H ₅
Relative molecular weight:	88,11
CAS:	141-78-6
EINECS:	205-500-4

A.G. (13700)

Appearance	clear colourless liquid
Assay	min. 99,7 %
Free acids (as CH ₃ COOH)	max. 0,005 %
Water	max. 0,05 %
Residue after evaporation	max. 0,002 %
Boiling point	76 - 77 °C
Density (20 °C)	0,900 g/cm ³
Refractive index	1,372
Flash point	-2 °C

pure (13690)

Appearance	clear colourless liquid
Assay	min. 99,5 %
Free acids (as CH ₃ COOH)	max. 0,01 %
Water	max. 0,1 %
Boiling point	75 - 77 °C
Density (20 °C)	0,900 g/cm ³
Refractive index	1,373
Flash point	-4 °C

Hazard Statements:	225, 319, 336
EUH Statements:	066
Precautionary Statements:	210, 240, 261, 305+351+338
Signal Word:	Danger
ADR/RID:	UN 1173 3 /F1 /II



Ethylene glycol

Chemical formula:	HOCH ₂ CH ₂ OH
Relative molecular weight:	62,07
CAS:	107-21-1
EINECS:	203-473-3

A.G. (13680)

Appearance	clear colourless liquid
Assay	min. 99,0 %
Water	max. 0,3 %
Boiling point	195 - 197 °C
Density (20 °C)	1,113 - 1,116 g/cm ³
Refractive index	1,430 - 1,433

pure (13660)

Appearance	clear colourless liquid
Assay	min. 98,0 %

Hazard Statements:	302, 373
EUH Statements:	
Precautionary Statements:	301+312, 330
Signal Word:	Warning
ADR/RID:	



E

Fluorescein free acid

Chemical formula:	C ₂₀ H ₁₂ O ₅
Relative molecular weight:	332,32
CAS:	2321-07-5
EINECS:	219-031-8

indicator (13970)

Appearance	brick red powder
Appearance of solution	clear, yellow with green opalescence

Hazard Statements:

EUH Statements:

Precautionary Statements: 260, 262

Signal Word: Warning

ADR/RID:

Formaldehyde 36 - 38%

Chemical formula:	HCHO
Relative molecular weight:	30,03
CAS:	50-00-0
EINECS:	200-001-8

A.G. (14150)

Appearance	clear colourless liquid
Assay	36,0 - 38,0 %
Density (20 °C)	1,073 - 1,092 g/cm ³
Free acids (as HCOOH)	max. 0,04 %
Ash	max. 0,008 %
Chloride (Cl ⁻)	max. 0,0005 %
Sulfate (SO ₄ ²⁻)	max. 0,002 %
Fe (Iron)	max. 0,0005 %
Heavy metals (as Pb)	max. 0,0004 %
Stabilizer	methanol 9 - 15 %

Hazard Statements:

350, 341, 331, 311, 301, 314, 317, 370

EUH Statements:

Precautionary Statements: 302+352, 405, 280, 311

Signal Word: Danger

ADR/RID: UN 2209 8 /C9 /III



Formamide

Chemical formula:	HCONH ₂
Relative molecular weight:	45,04
CAS:	75-12-7
EINECS:	200-842-0

A.G. (14190)

Appearance	clear colourless liquid
Assay	min. 99,0 %
Water	max. 0,1 %
Fe (Iron)	max. 0,0001 %
Pb (Lead)	max. 0,0001 %

pure (14180)

Appearance	clear colourless liquid
Assay	min. 98,0 %

ACS (40660)

Appearance	clear colourless liquid
Assay	min. 99,5 %
Freezing point	2,0 - 3,0 °C
Color scale (APHA)	max. 10

Hazard Statements:

360FD, 351, 373

EUH Statements:

Precautionary Statements: 201, 280, 308+313

Signal Word: Danger

ADR/RID:



Formic acid 85%

Chemical formula:	HCOOH
Relative molecular weight:	46,03
CAS:	64-18-6
EINECS:	200-579-1

A.G. (19900)

Appearance	clear colourless liquid
Assay	min. 85,0 %
Residue after evaporation	max. 0,005 %
Chloride (Cl ⁻)	max. 0,005 %
Sulfate (SO ₄ ²⁻)	max. 0,005 %
Fe (Iron)	max. 0,002 %
Heavy metals (as Pb)	max. 0,005 %
Density (20 °C)	1,190 g/cm ³
Refractive index	1,370
Flash point	59 °C

pure (19890)

Appearance	clear colourless liquid
Assay	~ 85,0 %
Density (20 °C)	1,190 g/cm ³
Refractive index	1,370

Hazard Statements:	314, 302, 331
EUH Statements:	071
Precautionary Statements:	260, 280, 305+351+338, 304+340, 303+361+353, 301+330+331, 310

Signal Word:	Danger
ADR/RID:	UN 1779 8 /C3 /II



Formic acid 98%

Chemical formula:	HCOOH
Relative molecular weight:	46,03
CAS:	64-18-6
EINECS:	200-579-1

A.G. (19930)

Appearance	clear colourless liquid
Assay	~ 98,0 %
Water	~ 2,0 %
Residue after evaporation	max. 0,002 %
CH ₃ COOH	max. 0,1 %
Chloride (Cl ⁻)	max. 0,001 %
Sulfate (SO ₄ ²⁻)	max. 0,005 %
Sulfites (SO ₃ ²⁻)	max. 0,015 %
Melting point	> 4 °C
Boiling point	100 - 101 °C
Density (20 °C)	1,220 g/cm ³
Refractive index	1,371
Flash point	48 °C

pure (19920)

Appearance	clear colourless liquid
Assay	~ 98,0 %
Water	~ 2,0 %
Melting point	> 4 °C
Boiling point	99 - 101 °C
Density (20 °C)	1,220 g/cm ³
Refractive index	1,371
Flash point	48 °C

Hazard Statements:	226, 302, 314, 331
EUH Statements:	071
Precautionary Statements:	210, 260, 280, 305+351+338, 304+340, 303+361+353, 301+330+331, 310

Signal Word:	Danger
ADR/RID:	UN 1779 8 /CF1 /II



Formic acid 99%

Chemical formula:	HCOOH
Relative molecular weight:	46,03
CAS:	64-18-6
EINECS:	200-579-1

A.G.

Appearance	clear colourless liquid
Assay	min. 98,5 %
Infrared spectrometry	passes test
Color scale (APHA)	max. 10 APHA
Residue after evaporation	max. 0,005 %
Chloride (Cl ⁻)	max. 0,0005 %
Sulfate (SO ₄ ²⁻)	max. 0,005 %
Sulfites (SO ₃ ²⁻)	max. 0,002 %
Cd (Cadmium)	max. 0,1 ppm
Cu (Copper)	max. 0,1 ppm
Fe (Iron)	max. 2 ppm
Pb (Lead)	max. 0,1 ppm
Refractive index	1,370 - 1,372
Dilution test	passes test

Hazard Statements:	226, 302, 314, 331
EUH Statements:	071
Precautionary Statements:	210, 260, 280, 305+351+338, 304+340, 303+361+353, 301+330+331, 310

Signal Word:	Danger
ADR/RID:	UN 1779 8 /CF1 /II



F

D-Fructose

Chemical formula:	C ₆ H ₁₂ O ₆
Relative molecular weight:	180,16
CAS:	57-48-7
EINECS:	200-333-3

A.G. (12000)

Appearance	white crystalline substance
Water	max. 0,5 %
Sulphated ash	max. 0,1 %
[α] _D 20 (c = 10 in water)	-93,5 až -91 °

Fuchsin basic

Chemical formula:	C ₂₀ H ₂₀ ClN ₃
Relative molecular weight:	337,85
CAS:	58969-01-0
EINECS:	211-189-6

indicator (14380)

C. I. No.	42510
Appearance	dark green powder
Functional test	passes test

Hazard Statements:	351, 302
EUH Statements:	
Precautionary Statements:	102, 280
Signal Word:	Warning
ADR/RID:	



Gallic acid monohydrate

Chemical formula:	C ₇ H ₆ O ₅ · H ₂ O
Relative molecular weight:	188,14
CAS:	5995-86-8
EINECS:	205-749-9

A.G. (19270)

Appearance	beige powder
Assay	min. 98,0 %
Sulphated ash	max. 0,1 %
Chloride (Cl ⁻)	max. 0,01 %
Sulfate (SO ₄ ²⁻)	max. 0,01 %
Melting point	~ 255 °C (decomposition)

ACS (40370)

Appearance	beige powder
Assay	min. 98,0 %
Insoluble matter	max. 0,01 %
Sulfate (SO ₄ ²⁻)	max. 0,02 %
Residue on ignition (600 °C)	max. 0,05 %

pure (31870)

Appearance	beige powder
Assay	min. 98,0 %

Hazard Statements:	315, 319, 335
EUH Statements:	
Precautionary Statements:	280, 305+351+338
Signal Word:	Warning
ADR/RID:	



Gelatine

Chemical formula:	
Relative molecular weight:	
CAS:	9000-70-8
EINECS:	232-554-6

A.G. (28650)

Appearance	yellowish crystalline substance
Loss on drying (110°C)	max. 15,0 %
Ash	max. 2,0 %
Heavy metals (as Pb)	max. 0,005 %
Sulfur dioxide	max. 0,02 %
Peroxides	max. 0,01 %
pH (1% water solution, 55 °C)	3,8 - 7,6

D-Glucose anhydrous

Chemical formula:	C ₆ H ₁₂ O ₆
Relative molecular weight:	180,16
CAS:	50-99-7
EINECS:	207-757-8

A.G. (12020)

Appearance	white powder
[α] _D 20 (c = 10 in water)	+53 +/- 2,0 °
Sulphated ash	max. 0,1 %
Fe (Iron)	max. 0,0005 %
Heavy metals (as Pb)	max. 0,0005 %
Melting point	149 - 152 °C

ACS (43440)

Appearance	white powder
Specific rotation [α] _D 25	+52,5 až +53,0 °
Insoluble matter	max. 0,005 %
Loss on drying	max. 0,2 %
Residue on ignition	max. 0,02 %
Free acid	max. 0,002 meq/g
Chloride (Cl ⁻)	max. 0,0005 %
Heavy metals (as Pb)	max. 0,0005 %
Melting point	149 - 152 °C



D-Glucose monohydrate

Chemical formula:	C ₆ H ₁₂ O ₆ · H ₂ O
Relative molecular weight:	198,17
CAS:	14431-43-7
EINECS:	200-075-1

A.G. (12030)

Appearance	white powder
[α] _D 20 (c = 10 in water)	+52,5 až +53,3 °
Sulphated ash	max. 0,1 %
Fe (Iron)	max. 0,0005 %
Heavy metals (as Pb)	max. 0,0005 %

Glutaraldehyde solution 25% in water

Chemical formula:	C ₅ H ₈ O ₂
Relative molecular weight:	100,12
CAS:	111-30-8
EINECS:	

See below (14500)

Appearance	clear, colourless or yellowish liquid
Refractive index	1,374 - 1,376
Density (20 °C)	1,060 - 1,064 g/cm ³

Hazard Statements:	302, 330, 314, 317, 334, 335, 400 071
EUH Statements:	
Precautionary Statements:	260, 273, 280, 305+351+338, 301+330+331, 304+340

Signal Word:	Danger
ADR/RID:	UN 2922 8 /CT1 /II



L-Glutamic acid

Chemical formula:	C ₅ H ₉ NO ₄
Relative molecular weight:	147,13
CAS:	56-86-0
EINECS:	200-293-7

A.G. (19760)

Appearance	white crystalline substance
Assay	min. 99,0 %
Loss on drying (110°C)	max. 0,1 %
Sulphated ash	max. 0,1 %
Chloride (Cl ⁻)	max. 0,01 %
Heavy metals (as Pb)	max. 0,0005 %
[α] _D 20 (c = 5 in 5M HCl)	+31,5 +/- 1,0 °

Glycerol anhydrous

Chemical formula:	HOCH ₂ CH(OH)CH ₂ OH
Relative molecular weight:	92,1
CAS:	56-81-5
EINECS:	200-289-5

A.G. (14550)

Appearance	clear colourless viscous liquid
Assay	min. 99,5 %
Sulphated ash	max. 0,01 %
Chloride (Cl ⁻)	max. 0,001 %
Heavy metals (as Pb)	max. 0,0005 %
Water	max. 0,5 %
Color scale (APHA)	max. 10
Density (20 °C)	1,258 - 1,263 g/cm ³
Refractive index	1,470 - 1,474

pure (14530)

Appearance	clear colourless viscous liquid
Assay	min. 99,5 %
Water	max. 0,5 %

Glycine

Chemical formula:	NH ₂ CH ₂ COOH
Relative molecular weight:	75,07
CAS:	56-40-6
EINECS:	200-272-2

A.G. (14570)

Appearance	white crystalline substance
Assay	min. 99,0 %
Sulphated ash	max. 0,01 %
Fe (Iron)	max. 0,001 %
Heavy metals (as Pb)	max. 0,001 %

Glycolic acid

Chemical formula:	C ₂ H ₄ O ₃
Relative molecular weight:	76,05
CAS:	79-14-1
EINECS:	201-180-5

See below (46950)

Appearance	white to yellowish crystals
Assay	min. 99,5 %
Water	max. 0,5 %
Melting point	75°C až 79°C
Fe (Iron)	max. 5 ppm
Heavy metals (as Pb)	max. 10 ppm
Infrared spectrometry	passes test

Hazard Statements:	314,302
EUH Statements:	
Precautionary Statements:	280, 305+351+338, 301+330+331, 308+311
Signal Word:	Danger
ADR/RID:	UN 3261 8 /C4 /II





Glycolic acid 70%

Chemical formula:	C ₂ H ₄ O ₃
Relative molecular weight:	76,05
CAS:	79-14-1
EINECS:	201-180-5

[pure \(19280\)](#)

Appearance	clear yellowish liquid
Assay	min. 63,0 - 72,0 %

[See below](#)

Appearance	clear yellowish liquid
Assay	69,0 - 74,0
Density (20 °C)	1,260 - 1,280
Refractive index	1,410 - 1,415
Heavy metals (as Pb)	max. 3 ppm
pH	0,0 - 1,0
Color scale (APHA)	max. 30

Hazard Statements:	314
EUH Statements:	
Precautionary Statements:	280, 301+330+331, 305+351+338, 310
Signal Word:	Danger
ADR/RID:	UN 3265 8 /C3 /II



n-Heptane

Chemical formula:	CH ₃ (CH ₂) ₅ CH ₃
Relative molecular weight:	100,21
CAS:	142-82-5
EINECS:	205-563-8

[A.G. \(22230\)](#)

Appearance	clear colourless liquid
Assay	min. 99,0 %
Water	max. 0,02 %
Residue after evaporation	max. 0,001 %
Free acids (as CH ₃ COOH)	max. 0,001 %
Boiling point	97 - 99 °C
Density (20 °C)	0,684 g/cm ³
Refractive index	1,388
Flash point	-4 °C

[pure \(22220\)](#)

Appearance	clear colourless liquid
Assay	min. 95,0 %
Residue after evaporation	max. 0,005 %

[for UV \(31280\)](#)

Appearance	clear colourless liquid
Assay	min. 99,0 %
Residue after evaporation	max. 0,0005 %
Water	max. 0,005 %
Transmittance at 210 nm	min. 50 %
Transmittance at 220 nm	min. 80 %
Transmittance at 230 nm	min. 92 %
Transmittance at 245 nm	min. 98 %

Hazard Statements:	225, 304, 315, 336, 410
EUH Statements:	
Precautionary Statements:	210, 273, 301+310, 331, 243
Signal Word:	Danger
ADR/RID:	UN 1206 3 /F1 /II



Hexamethylenetetramine

Chemical formula:	C ₆ H ₁₂ N ₄
Relative molecular weight:	140,19
CAS:	100-97-0
EINECS:	202-905-8

[A.G. \(14790\)](#)

Appearance	white crystalline substance
Assay	min. 99,5 %
pH (10% water solution, 20 °C)	8,5 - 9,5
Chloride (Cl ⁻)	max. 0,005 %
Sulfate (SO ₄ ²⁻)	max. 0,005 %
Ammonium (NH ₄ ⁺)	max. 0,01 %
Sulphated ash	max. 0,01 %

[pure \(14780\)](#)

Appearance	white crystalline substance
Assay	min. 99,0 %

[See below](#)

Appearance	white crystalline substance
Assay	min. 98,0 %
Anti-caking agent	~ 1,5 %

Hazard Statements:	228, 317
EUH Statements:	
Precautionary Statements:	210, 280, 302+352
Signal Word:	Warning
ADR/RID:	UN 1328 4.1 /F1 /III



H

n-Hexane

Chemical formula:	CH ₃ (CH ₂) ₄ CH ₃
Relative molecular weight:	86,18
CAS:	110-54-3
EINECS:	203-777-6

A.G. (22280)

Appearance	clear colourless liquid
Assay	min. 99,0 %
Water	max. 0,01 %
Residue after evaporation	max. 0,001 %
Free acids (as CH ₃ COOH)	max. 0,002 %
Boiling point	68 - 70 °C
Density (20 °C)	0,659 g/cm ³
Refractive index	1,375
Flash point	-26 °C

pure (22260)

Appearance	clear colourless liquid
Assay	min. 95,0 %
Boiling point	67 - 69 °C
Density (20 °C)	0,659 g/cm ³
Refractive index	1,376

for UV (22290)

Appearance	clear colourless liquid
Assay	min. 95,0 %
Residue after evaporation	max. 0,0005 %
Water	max. 0,02 %
Free acids	max. 0,0002 meq/g
Density (20 °C)	0,659 g/cm ³
Refractive index	1,373 - 1,377
Infrared spectrometry	passes test
UV absorption at 195 nm	max. 1,00
UV absorption at 210 nm	max. 0,30
UV absorption at 220 nm	max. 0,10
UV absorption at 230 nm	max. 0,05
UV absorption at 240 nm	max. 0,02
UV absorption at 250 to 400 nm	max. 0,01

for HPLC (22270)

Appearance	clear colourless liquid
Assay	min. 95,0 %

Residue after evaporation

Water

Free acids

Density (20 °C)

Refractive index

Infrared spectrometry

UV absorption at 200 nm

UV absorption at 210 nm

UV absorption at 220 nm

UV absorption at 225 nm

UV absorption at 245 nm

Hazard Statements:

EUH Statements:

Precautionary Statements:

Signal Word:

ADR/RID:

max. 0,0005 %

max. 0,02 %

max. 0,0002 meq/g

0,659 g/cm³

1,373 - 1,377

passes test

max. 1,00

max. 0,35

max. 0,10

max. 0,06

max. 0,01

225, 361f, 304, 373, 315, 336, 411

210, 243, 273, 280, 301+310, 331

Danger

UN 1208 3 /F1 /II



Hexane - mixture of isomers

Chemical formula:

Relative molecular weight:

CAS:

EINECS: 925-252-5

See below (22268)

Appearance	clear colourless liquid
Boiling point	65 - 70 °C
Residue after evaporation	max. 0,001 %
Density (20 °C)	~ 0,670 g/cm ³
Refractive index	1,380
Flash point	-26 °C

Hazard Statements:

EUH Statements:

Precautionary Statements:

Signal Word:

ADR/RID:

225, 361f, 304, 373, 315, 336, 411

210, 243, 273, 281, 370+378

Danger

UN 1208 3 /F1 /II



Hydrazine hydrate solution 24% in water

Chemical formula:	NH ₂ · NH ₂ · H ₂ O
Relative molecular weight:	50,06
CAS:	10217-52-4
EINECS:	206-114-9

pure (14920)

Appearance	clear colourless liquid
Density (20 °C)	1,010 g/cm ³
Chloride (Cl ⁻)	max. 0,005 %
Sulfate (SO ₄ ²⁻)	max. 0,005 %
Fe (Iron)	max. 0,001 %
Heavy metals (as Pb)	max. 0,001 %
Sulphated ash	max. 0,05 %

Hazard Statements: 314, 350, 331, 302, 312, 317, 410

EUH Statements:

Precautionary Statements: 201, 273, 280, 305+351+338, 310

Signal Word: Danger

ADR/RID: UN 3293 6.1 /T4 /III



1-Hexanol

Chemical formula:	C ₆ H ₁₄ O
Relative molecular weight:	102,18
CAS:	111-27-3
EINECS:	203-852-3

See below

Appearance	clear colourless liquid
Assay	min 98,0 %
Density (20 °C)	0,817 - 0,821
Infrared spectrometry	passes test

Hazard Statements: 226, 302+312, 319

EUH Statements:

Precautionary Statements: 210, 302+352, 305+351+338

Signal Word: Warning

ADR/RID: UN 2282 3 /F1 /III



L-Histidine

Chemical formula:	C ₆ H ₉ N ₃ O ₂
Relative molecular weight:	155,16
CAS:	71-00-1
EINECS:	200-745-3

A.G. (20900)

Appearance	white powder
Assay	min. 99,0 %
[α] _D ²⁵ (c = 11 in 6M HCl)	12,6 - 14,0 °

H

Hydrazine hydrate solution 25% in water

Chemical formula:	$\text{NH}_2 \cdot \text{NH}_2 \cdot \text{H}_2\text{O}$
Relative molecular weight:	50,06
CAS:	10217-52-4
EINECS:	206-114-9

A.G. (14940)

Appearance	clear colorless liquid
Assay	24 - 26 %
Chloride (Cl^-)	max. 0.005 %
Sulfate (SO_4^{2-})	max. 0.005 %
Fe (Iron)	max. 0.0005 %
Heavy metals (as Pb)	max. 0.001 %
Sulphated ash	max. 0.05 %

Hazard Statements: 302, 312, 314, 317, 331, 350, 410

EUH Statements:

Precautionary Statements: 201, 273, 280, 305+351+338, 310

Signal Word: Danger

ADR/RID: UN 3293 6.1 /T4 /III



Hydrazine monohydrate

Chemical formula:	$\text{NH}_2 \cdot \text{NH}_2 \cdot \text{H}_2\text{O}$
Relative molecular weight:	50,06
CAS:	7803-57-8
EINECS:	206-114-9

pure

Appearance	clear colourless liquid
Assay	min. 99,0 %
Chloride (Cl^-)	max. 0,005 %
Sulfate (SO_4^{2-})	max. 0,005 %
Fe (Iron)	max. 0,001 %
Heavy metals (as Pb)	max. 0,001 %
Sulphated ash	max. 0,05 %

Hazard Statements: 226, 350, 331, 311, 301, 317, 314, 410

EUH Statements:

Precautionary Statements: 210, 201, 273, 280

Signal Word: Danger

ADR/RID: UN 2030 8 /CT1 /II



Hydrazine sulfate

Chemical formula:	$\text{NH}_2 \cdot \text{NH}_2 \cdot \text{H}_2\text{SO}_4$
Relative molecular weight:	130,12
CAS:	10034-93-2
EINECS:	233-110-4

A.G. (14980)

Appearance	white crystalline substance
Assay	min. 99,0 %
Sulphated ash	max. 0,05 %
Chloride (Cl^-)	max. 0,005 %
Fe (Iron)	max. 0,001 %
Heavy metals (as Pb)	max. 0,005 %
Loss on drying	max. 0,1 %

pure (14970)

Appearance	white crystalline substance
Assay	min. 99,0 %

Hazard Statements: 350, 331, 311, 301, 317, 410

EUH Statements:

Precautionary Statements: 201, 280, 308+313, 273

Signal Word: Danger

ADR/RID: UN 3288 6.1 /T5 /III



Hydrobromic acid 46-48%

Chemical formula:	HBr
Relative molecular weight:	80,92
CAS:	10035-10-6
EINECS:	233-113-0

A.G. (18750)

Appearance	clear yellowish liquid
Assay	46,0 - 48,0 %
Sulphated ash	max. 0,002 %
Chloride (Cl ⁻)	max. 0,02 %
Iodide (I ⁻)	max. 0,002 %
SO ₄ ²⁻ + SO ₃ ²⁻ (as SO ₄ ²⁻)	max. 0,005 %
Density (20 °C)	1,500 g/cm ³
Refractive index	1,438

pure (18740)

Appearance	clear yellowish liquid
Assay	46,0 - 48,0 %
Sulphated ash	max. 0,01 %
SO ₄ ²⁻ + SO ₃ ²⁻ (as SO ₄ ²⁻)	max. 0,01 %
Density (20 °C)	1,500 g/cm ³
Hazard Statements:	314, 335
EUH Statements:	
Precautionary Statements:	261, 280, 305+351+338, 310, 304+340
Signal Word:	Danger
ADR/RID:	UN 1788 8 /C1 /II



Hydrofluoric acid 38-40%

Chemical formula:	HF
Relative molecular weight:	20,01
CAS:	7664-39-3
EINECS:	231-634-8

A.G. (19030)

Appearance	clear colourless liquid
Assay	38,0 - 40,0 %
H ₂ SiF ₆	max. 0,1 %
Chloride (Cl ⁻)	max. 0,001 %
Sulfate (SO ₄ ²⁻)	max. 0,001 %
Sulfites (SO ₃ ²⁻)	max. 0,005 %
Fe (Iron)	max. 0,0005 %
Pb (Lead)	max. 0,0005 %

pure (19040)

Appearance	clear colourless liquid
Assay	38,0 - 40,0 %
H ₂ SiF ₆	max. 0,1 %
Chloride (Cl ⁻)	max. 0,005 %
Sulfate (SO ₄ ²⁻)	max. 0,01 %
Fe (Iron)	max. 0,0005 %
Pb (Lead)	max. 0,0005 %

semiconductor grade (19050)

Appearance	clear colourless liquid
Assay	38,0 - 40,5 %
H ₂ SiF ₆	max. 0,09 %
Chloride (Cl ⁻)	max. 0,001 %
Sulfate (SO ₄ ²⁻)	max. 0,001 %
Sulfites (SO ₃ ²⁻)	max. 0,001 %
Cu (Copper)	max. 0,000005 %
Fe (Iron)	max. 0,00002 %
Pb (Lead)	max. 0,00005 %

Hazard Statements:	330, 310, 300, 314
EUH Statements:	
Precautionary Statements:	260, 280, 305+351+338, 301+310, 302+350, 304+340
Signal Word:	Danger
ADR/RID:	UN 1790 8 /CT1 /II



Hydrofluoric acid 50%

Chemical formula:	HF
Relative molecular weight:	20,01
CAS:	7664-39-3
EINECS:	231-634-8

A.G. (19110)

Appearance	clear colourless liquid
Assay	49,0 - 51,0 %
H ₂ SiF ₆	max. 0,1 %
Chloride (Cl ⁻)	max. 0,001 %
Sulfate (SO ₄ ²⁻)	max. 0,001 %
Sulfites (SO ₃ ²⁻)	max. 0,005 %
Fe (Iron)	max. 0,0005 %
Pb (Lead)	max. 0,0005 %

semiconductor grade (19120)

Appearance	clear colourless liquid
Assay	49,0 - 51,0 %
H ₂ SiF ₆	max. 0,09 %
Chloride (Cl ⁻)	max. 0,001 %
Sulfate (SO ₄ ²⁻)	max. 0,001 %
Sulfites (SO ₃ ²⁻)	max. 0,001 %
Cu (Copper)	max. 0,000005 %
Fe (Iron)	max. 0,00002 %
Pb (Lead)	max. 0,00005 %

Hazard Statements:	330, 310, 300, 314
EUH Statements:	
Precautionary Statements:	260, 280, 305+351+338, 301+310, 302+350, 304+340
Signal Word:	Danger
ADR/RID:	UN 1790 8 /CT1 /II



H

Hydrogen peroxide 3% in water

Chemical formula:	H ₂ O ₂
Relative molecular weight:	34,02
CAS:	7722-84-1
EINECS:	231-765-0

[See below \(32680\)](#)

Appearance	clear colourless liquid
Assay	3,0 ± 0,5 %

Hydrogen peroxide 30%

Chemical formula:	H ₂ O ₂
Relative molecular weight:	34,02
CAS:	7722-84-1
EINECS:	231-765-0

[A.G. \(23980\)](#)

Appearance	clear colourless liquid
Assay	29,0 - 32,0 %
Free acids (as H ₂ SO ₄)	max. 0,005 %
Residue after evaporation	max. 0,005 %
Total nitrogen (as N)	max. 0,002 %
Chloride (Cl ⁻)	max. 0,0005 %
Sulfate (SO ₄ ²⁻)	max. 0,0005 %
Phosphate (PO ₄ ³⁻)	max. 0,0005 %
Fe (Iron)	max. 0,00002 %
Heavy metals (as Pb)	max. 0,00002 %
Density (20 °C)	1,11 g/cm ³

Hazard Statements:	302, 318
EUH Statements:	
Precautionary Statements:	280, 302+352, 305+351+338
Signal Word:	Danger
ADR/RID:	UN 2014 5.1 /OC1 /II



Hydrogen peroxide 5% in water

Chemical formula:	H ₂ O ₂
Relative molecular weight:	34,02
CAS:	7722-84-1
EINECS:	231-765-0

[See below \(45130\)](#)

Appearance	clear colourless liquid
Assay	5,0 ± 0,5 %

Hazard Statements:	319
EUH Statements:	
Precautionary Statements:	280, 305+351+338
Signal Word:	Warning
ADR/RID:	



Hydrogen peroxide 50%

Chemical formula:	H ₂ O ₂
Relative molecular weight:	34,02
CAS:	7722-84-1
EINECS:	231-765-0

[See below \(44170\)](#)

Appearance	clear colourless liquid
Assay	48 - 52 %
Hazard Statements:	272, 314, 335, 302+332, 412
EUH Statements:	
Precautionary Statements:	210, 280, 305+351+338, 310
Signal Word:	Danger
ADR/RID:	UN 2014 5.1 /OC1 /II



Hydrogen peroxide 6% in water

Chemical formula:	
Relative molecular weight:	
CAS:	
EINECS:	

[See below \(23950\)](#)

Appearance	clear colourless liquid
Assay	6,0 ± 0,5 %
Hazard Statements:	319
EUH Statements:	
Precautionary Statements:	280, 305+351+338
Signal Word:	Warning
ADR/RID:	



Hydrochloric acid 35%+

Chemical formula:	HCl
Relative molecular weight:	36,46
CAS:	7647-01-0
EINECS:	231-595-7

[A.G. \(19360\)](#)

Appearance	clear liquid
Color scale (APHA)	max. 20 APHA
Assay	min. 35,0 %
Free chlorine	max. 0,0005 %
Sulfate (SO ₄ ²⁻)	max. 0,0002 %
H ₂ SO ₃ (as SO ₃ ²⁻)	max. 0,001 %
As (Arsenic)	max. 0,00001 %
Fe (Iron)	max. 0,0001 %
Heavy metals (as Pb)	max. 0,0003 %
Ca (Calcium)	max. 0,001 %
K (Potassium)	max. 0,001 %
Na (Sodium)	max. 0,001 %
Mg (Magnesium)	max. 0,001 %
Density (20 °C)	1,180 - 1,189 g/cm ³

[pure \(19350\)](#)

Appearance	clear liquid
Color scale (APHA)	max. 20 APHA
Assay	min. 35,0 %
Free chlorine	max. 0,0008 %
Sulfate (SO ₄ ²⁻)	max. 0,0008 %
H ₂ SO ₃ (as SO ₃ ²⁻)	max. 0,001 %
As (Arsenic)	max. 0,00002 %
Fe (Iron)	max. 0,0005 %
Heavy metals (as Pb)	max. 0,001 %
Ca (Calcium)	max. 0,005 %
K (Potassium)	max. 0,001 %
Na (Sodium)	max. 0,002 %
Mg (Magnesium)	max. 0,001 %
Density (20 °C)	1,180 - 1,189 g/cm ³

Hazard Statements:	290, 314, 335
EUH Statements:	
Precautionary Statements:	261, 280, 305+351+338, 310, 304+340
Signal Word:	Danger
ADR/RID:	UN 1789 8 /C1 /II



H

Hydrochloric acid for determination of As

Chemical formula:	HCl
Relative molecular weight:	36,46
CAS:	7647-01-0
EINECS:	231-595-7

A.G. (19540)

Appearance	clear colourless liquid
Assay	min. 35,0 %
Sulphated ash	max. 0,001 %
Free chlorine	max. 0,0005 %
Sulfate (SO ₄ ²⁻)	max. 0,0002 %
H ₂ SO ₃ (as SO ₃ ²⁻)	max. 0,001 %
As (Arsenic)	max. 0,000005 %
Fe (Iron)	max. 0,0001 %
Pb (Lead)	max. 0,00003 %
Density (20 °C)	1,180 - 1,189 g/cm ³

Hazard Statements:	290, 314, 335
EUH Statements:	
Precautionary Statements:	261, 280, 305+351+338, 310, 304+340
Signal Word:	Danger
ADR/RID:	UN 1789 8 /C1 /II



Hydroiodic acid 55-58%

Chemical formula:	HI
Relative molecular weight:	127,92
CAS:	10034-85-2
EINECS:	233-109-9

A.G. (19720)

Appearance	clear yellow liquid
Assay	55,0 - 58,0 %
Br ⁻ , Cl ⁻ (as Cl ⁻)	max. 0,01 %
Sulfate (SO ₄ ²⁻)	max. 0,002 %
Fe (Iron)	max. 0,0002 %
Heavy metals (as Pb)	max. 0,0001 %
Density (20 °C)	1,700 g/cm ³

pure (19710)

Appearance	clear yellow liquid
Assay	55,0 - 58,0 %
Br ⁻ , Cl ⁻ (as Cl ⁻)	max. 0,02 %
Sulfate (SO ₄ ²⁻)	max. 0,005 %
Fe (Iron)	max. 0,0005 %
Heavy metals (as Pb)	max. 0,0005 %
Density (20 °C)	1,700 g/cm ³

Hazard Statements:	314
EUH Statements:	
Precautionary Statements:	280, 310, 305+351+338
Signal Word:	Danger
ADR/RID:	UN 1787 8 /C1 /II



Hydroquinone

Chemical formula:	HOC ₆ H ₄ OH
Relative molecular weight:	110,11
CAS:	123-31-9
EINECS:	204-617-8

for photo (15420)

Appearance	white crystalline substance
Assay	min. 99,0 %
Melting point	171 - 173 °C
Hazard Statements:	351, 341, 302, 318, 317, 410
EUH Statements:	
Precautionary Statements:	273, 280, 305+351+338, 308+311
Signal Word:	Danger
ADR/RID:	UN 3077 9 /M7 /III



Hydroxylamine hydrochloride

Chemical formula:	NH ₂ OH · HCl
Relative molecular weight:	69,49
CAS:	5470-11-1
EINECS:	226-798-2

97%+ (15850)

Appearance	white or almost white powder
Assay	min. 97,0 %

pure (15860)

Appearance	white or almost white powder
Assay	min. 98,0 %

Hazard Statements:	290, 351, 312, 302, 373, 319, 315, 317, 400
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EUH Statements:

Precautionary Statements: 260, 273, 280, 305+351+338, 301+310

Signal Word: Warning

ADR/RID: UN 2923 8 /CT2 /II



Indigo carmine

Chemical formula:	C ₁₆ H ₈ N ₂ Na ₂ O ₆ S ₂
Relative molecular weight:	466,36
CAS:	860-22-0
EINECS:	212-728-8

indicator (17300)

Appearance	black powder
C. I. No.	73015
Loss on drying	max. 10,0 %

Hazard Statements:	317
EUH Statements:	
Precautionary Statements:	280, 302+352
Signal Word:	Warning
ADR/RID:	



Iodine

Chemical formula:	I ₂
Relative molecular weight:	253,81
CAS:	7553-56-2
EINECS:	231-442-4

A.G. (17570)

Appearance	metallic grey granules
Assay	min. 99,5 %
Residue after evaporation	max. 0,02 %
Cl ⁻ , Br ⁻ (as Cl ⁻)	max. 0,005 %

pure (17560)

Appearance	metallic grey granules
Assay	min. 99,5 %
Residue after evaporation	max. 0,05 %
Cl ⁻ , Br ⁻ (as Cl ⁻)	max. 0,015 %

Hazard Statements: 332, 312, 302, 315, 319, 335, 372, 400

EUH Statements:

Precautionary Statements: 280, 273, 260, 314

Signal Word: Danger

ADR/RID: UN 3495 8 /CT2 /III



Iron powder

Chemical formula:	Fe
Relative molecular weight:	55,85
CAS:	7439-89-6
EINECS:	231-096-4

A.G. (28670)

Appearance	grey-black powder
Assay	min. 99,0 %
Soluble substances in water	max. 0,1 %
Insoluble matter in HCl	max. 0,5 %
Pb (Lead)	max. 0,005 %

Hazard Statements:	228
EUH Statements:	
Precautionary Statements:	210
Signal Word:	Danger
ADR/RID:	UN 3089 4.1 /F3 /III



Iron(II) chloride tetrahydrate

Chemical formula:	FeCl ₂ · 4 H ₂ O
Relative molecular weight:	198,81
CAS:	13478-10-9
EINECS:	213-843-4

A.G. (16940)

Appearance	green powder
Assay	min. 99,0 %
Sulfate (SO ₄ ²⁻)	max. 0,01 %
Pb (Lead)	max. 0,001 %
Iron (Fe ³⁺)	max. 0,2 %

Hazard Statements:	302, 315, 318
EUH Statements:	
Precautionary Statements:	280, 305+351+338
Signal Word:	Danger
ADR/RID:	UN 3260 8 /C2 /III



Iron(II) sulfate heptahydrate

Chemical formula:	FeSO ₄ · 7H ₂ O
Relative molecular weight:	278,02
CAS:	7782-63-0
EINECS:	231-753-5

A.G. (25990)

Appearance	green crystals
Assay	min. 99,0 %
Insoluble matter in water	max. 0,01 %
pH (5% water solution)	3,0 - 4,0
Chloride (Cl ⁻)	max. 0,01 %
Iron (Fe ³⁺)	max. 0,2 %

pure (25980)

Appearance	green crystals
Assay	min. 98,0 %
Hazard Statements:	302, 315, 319
EUH Statements:	
Precautionary Statements:	280, 302+352, 305+351+338
Signal Word:	Warning
ADR/RID:	



Iron(III) chloride anhydrous

Chemical formula:	FeCl ₃
Relative molecular weight:	162,21
CAS:	7705-08-0
EINECS:	231-729-4

pure (16870)

Appearance	black powder
Assay	min. 98,0 %
Heavy metals (as Pb)	max. 0,02 %

Hazard Statements:	290, 302, 315, 318, 411
EUH Statements:	
Precautionary Statements:	273, 280, 305+351+338, 302+352
Signal Word:	Danger
ADR/RID:	UN 1773 8 /C2 /III



Iron(III) chloride hexahydrate

Chemical formula:	FeCl ₃ · 6 H ₂ O
Relative molecular weight:	270,3
CAS:	10025-77-1
EINECS:	231-729-4

A.G. (16900)

Appearance	yellow-brown crystalline substance
Assay	99,0 - 102,0 %
Sulfate (SO ₄ ²⁻)	max. 0,01 %
Iron (Fe ²⁺)	max. 0,002 %

pure (16890)

Appearance	yellow-brown crystalline substance
Assay	min. 97,0 %

A.G. (16900)

Zn (Zinc)	max. 0,003 %
Cu (Copper)	max. 0,003 %
Phosphate (PO ₄ ³⁻)	max. 0,01 %
Nitrate (NO ₃ ⁻)	max. 0,01 %
Insoluble matter	max. 0,01 %

Hazard Statements: 290, 302, 315, 318

EUH Statements:

Precautionary Statements: 280, 302+352, 305+351+338

Signal Word: Danger

ADR/RID:



Iron(III) nitrate nonahydrate

Chemical formula:	Fe(NO ₃) ₃ · 9 H ₂ O
Relative molecular weight:	404
CAS:	7782-61-8
EINECS:	233-899-5

A.G. (13370)

Appearance	light purple crystals
Assay	min. 98,0 %
Chloride (Cl ⁻)	max. 0,005 %
Sulfate (SO ₄ ²⁻)	max. 0,005 %
Pb (Lead)	max. 0,001 %

pure (13380)

Appearance	light purple crystals
Assay	min. 97,0 %

Hazard Statements: 314, 318

EUH Statements:

Precautionary Statements: 280, 305+351+338, 302+352, 304+340

Signal Word: Danger

ADR/RID: UN 1466 5.1 /O2 /III



Iron(III) oxide

Chemical formula:	Fe ₂ O ₃
Relative molecular weight:	159,68
CAS:	1309-37-1
EINECS:	215-168-2

pure (23490)

Appearance	reddish brown powder
Assay	min. 97,0 %
Insoluble matter in HCl	max. 3,0 %

99%+ (43750)

Appearance	reddish brown powder
Assay	min. 99,0 %
Insoluble matter in HCl	max. 1,0 %

Hazard Statements: 319, 335, 315

EUH Statements:

Precautionary Statements: 305+351+338, 337+313

Signal Word: Warning

ADR/RID:



Iron(III) sulfate hydrate

Chemical formula:	Fe ₂ (SO ₄) ₃ · aq
Relative molecular weight:	
CAS:	15244-10-7
EINECS:	233-072-9

A.G. (25920)

Appearance	yellowish powder
Assay (Fe)	21,0 - 23,0 %
Chloride (Cl ⁻)	max. 0,005 %
Iron (Fe ²⁺)	max. 0,02 %
Insoluble matter in HCl	max. 0,01 %

pure (25910)

Appearance	yellowish powder
Assay (Fe)	21,0 - 23,0 %

Hazard Statements:	302, 319, 335
EUH Statements:	
Precautionary Statements:	261, 305+351+338
Signal Word:	Warning
ADR/RID:	



Isoamyl alcohol

Chemical formula:	(CH ₃) ₂ CHCH ₂ CH ₂ OH
Relative molecular weight:	88,15
CAS:	123-51-3
EINECS:	204-633-5

A.G. (17330)

Appearance	clear colourless liquid
Assay	min. 99,0 %
Water	max. 0,3 %
Residue after evaporation	max. 0,003 %
Aldehyde (as CH ₃ (CH ₂) ₃ CHO)	max. 0,1 %
Free acids (as CH ₃ COOH)	max. 0,01 %
Acids and esters (jako CH ₃ COOC ₅ H ₁₁)	max. 0,06 %
Boiling point	131 - 132 °C
Density (20 °C)	0,809 g/cm ³
Refractive index	1,407
Flash point	43 °C

pure (17320)

Appearance	clear colourless liquid
Assay	min. 99,0 %

Hazard Statements:	226, 332, 335
EUH Statements:	
Precautionary Statements:	301+310
Signal Word:	Warning
ADR/RID:	UN 1105 3 /F1 /III



Isobutyl alcohol

Chemical formula:	(CH ₃) ₂ CHCH ₂ OH
Relative molecular weight:	74,12
CAS:	78-83-1
EINECS:	201-148-0

A.G. (17350)

Appearance	clear colourless liquid
Assay	min. 99,0 %
Water	max. 0,05 %
Residue after evaporation	max. 0,001 %
Free acids (as butyric acid)	max. 0,005 %
Boiling point	107 - 108 °C
Density (20 °C)	0,801 g/cm ³
Refractive index	1,396
Flash point	28 °C

pure (17340)

Appearance	clear colourless liquid
Assay	min. 99,0 %

Hazard Statements:	226, 335, 315, 318, 336
EUH Statements:	
Precautionary Statements:	403+233, 305+351+338, 280
Signal Word:	Danger
ADR/RID:	UN 1212 3 /F1 /III



Isooctane

Chemical formula:	$(\text{CH}_3)_2\text{CHCH}_2\text{C}(\text{CH}_3)_3$
Relative molecular weight:	114,23
CAS:	540-84-1
EINECS:	208-759-1

A.G. (17420)

Appearance	clear colourless liquid
Assay	min. 99,5 %
Water	max. 0,005 %
Residue after evaporation	max. 0,001 %
Free acids (as CH_3COOH)	max. 0,001 %
Boiling point	~ 99 °C
Density (20 °C)	0,691 g/cm ³
Refractive index	1,391
Flash point	-12 °C

pure (17410)

Appearance	clear colourless liquid
Assay	min. 99,0 %
Residue after evaporation	max. 0,001 %
Boiling point	~ 99 °C
Density (20 °C)	0,691 g/cm ³
Refractive index	1,391
Flash point	-12 °C

for UV (17440)

Appearance	clear colourless liquid
Assay	min. 99,0 %
Residue after evaporation	max. 0,001 %
Water	max. 0,005 %
Free acids	max. 0,0003 meq/g
Sulfur compounds	max. 0,005 %
Color scale (APHA)	max. 10
Density (20 °C)	0,692 - 0,694 g/cm ³
Refractive index	1,390 - 1,392
Infrared spectrometry	passes test
UV absorption at 210 nm	max. 1,00
UV absorption at 220 nm	max. 0,2
UV absorption at 230 nm	max. 0,1
UV absorption at 240 nm	max. 0,04
UV absorption at 250 nm	max. 0,01
UV absorption at 400 nm	max. 0,01

Hazard Statements:

EUH Statements:

Precautionary Statements:

Signal Word:

ADR/RID:

225, 304, 315, 336, 410

210, 243, 273, 301+310, 331

Danger

UN 1262 3 /F1 /II



Isopropyl alcohol

Chemical formula:	$(\text{CH}_3)_2\text{CHOH}$
Relative molecular weight:	60,1
CAS:	67-63-0
EINECS:	200-661-7

A.G. (17510)

Appearance	clear colourless liquid
Assay	min. 99,8 %
Residue after evaporation	max. 0,002 %
Free acids (as CH_3COOH)	max. 0,001 %
Boiling point	81 - 83 °C
Density (20 °C)	0,785 g/cm ³
Refractive index	1,378
Flash point	12 °C

pure (17500)

Appearance	clear colourless liquid
Assay	min. 99,5 %
Residue after evaporation	max. 0,01 %
Free acids (as CH_3COOH)	max. 0,001 %
Boiling point	80 - 83 °C
Density (20 °C)	0,785 g/cm ³
Refractive index	1,377
Flash point	12 °C

for HPLC (17540)

Appearance	clear colourless liquid
Assay	min. 99,5 %
Residue after evaporation	max. 0,0003 %
Water	max. 0,05 %
Density (20 °C)	0,785 g/cm ³
Refractive index	1,377
Infrared spectrometry	passes test
UV absorption at 205 nm	max. 1,00
UV absorption at 220 nm	max. 0,30
UV absorption at 230 nm	max. 0,15
UV absorption at 245 nm	max. 0,05
UV absorption at 260 nm	max. 0,03
UV absorption at 300 to 400 nm	max. 0,01

for UV (17550)

Appearance	clear colourless liquid
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Assay	min. 99,5 %
Residue after evaporation	max. 0,001 %
Water	max. 0,2 %
Free acids	max. 0,0001 meq/g
Free alkali	max. 0,0001 meq/g
Carbonyl compounds	max. 0,002 %
Color scale (APHA)	max. 10
Density (20 °C)	0,785 g/cm ³
Refractive index	1,377
Infrared spectrometry	passes test
UV absorption at 210 nm	max. 1,00
UV absorption at 220 nm	max. 0,40
UV absorption at 230 nm	max. 0,20
UV absorption at 245 nm	max. 0,08
UV absorption at 260 nm	max. 0,04
UV absorption at 300 nm	max. 0,02
UV absorption at 400 nm	max. 0,01

ACS (17480)

Appearance	clear colourless liquid
Assay	min. 99,5 %
Solubility in water	passes test
Carbonyl compounds	max. 0,002 %
Color scale (APHA)	max. 10
Residue after evaporation	max. 0,001 %
Water	max. 0,2 %
Free acids	max. 0,0001 meq/g
Free alkali	max. 0,0001 meq/g
Density (20 °C)	0,785 g/cm ³
Refractive index	1,377
Infrared spectrometry	passes test

technical (37530)

Appearance	clear colourless liquid
Assay	min. 98,5 %

99,8%+99,8%+ (47490)

Appearance	clear colourless liquid
Assay	min. 99,8 %
Residue after evaporation	max. 0,002 %
Free acids (as CH ₃ COOH)	max. 0,001 %
Boiling point	81 - 83 °C
Density (20 °C)	0,785 g/cm ³
Refractive index	1,378

Hazard Statements:
EUH Statements:
Precautionary Statements:
Signal Word:
ADR/RID:

225, 319, 336
019
233, 210, 305+351+338
Danger
UN 1219 3 /F1 /II



Isopropyl alcohol solution 70% in water

Chemical formula: (CH₃)₂CHOH
Relative molecular weight: 60,1
CAS: 67-63-0
EINECS: 200-661-7

A.G. (17530)

Appearance clear colourless liquid
Density (20 °C) 0,857 - 0,867

Hazard Statements: 225, 319, 336
EUH Statements: 019
Precautionary Statements: 210, 233, 305+351+338
Signal Word: Danger
ADR/RID: UN 1219 3 /F1 /II



L

L(+)-Lactic acid 80%

Chemical formula:	CH ₃ CH(OH)COOH
Relative molecular weight:	90,08
CAS:	79-33-4
EINECS:	201-196-2

pure (19860)

Appearance	clear colourless liquid
Assay	min. 80,0 %

Hazard Statements:	314, 318
EUH Statements:	071
Precautionary Statements:	280, 305+351+338, P301+P330+P331, P303+P361+P353, 310

Signal Word:	Danger
ADR/RID:	



Lanthanum(III) chloride hydrate

Chemical formula:	LaCl ₃ · aq
Relative molecular weight:	
CAS:	20211-76-1
EINECS:	233-237-5

A.G. (16400)

Appearance	white crystalline substance
Assay (La)	36 - 40 %
Sulfate (SO ₄ ²⁻)	max. 0,005 %
Ca (Calcium)	max. 0,005 %
Fe (Iron)	max. 0,0005 %
Pb (Lead)	max. 0,0005 %

Hazard Statements:	315, 319, 335
EUH Statements:	
Precautionary Statements:	261, 305+351+338
Signal Word:	Danger
ADR/RID:	



Lanthanum(III) oxide

Chemical formula:	La ₂ O ₃
Relative molecular weight:	325,81
CAS:	1312-81-8
EINECS:	215-200-5

A.G. (23290)

Appearance	white powder
Assay	min. 99,0 %
Ca (Calcium)	max. 0,005 %

Hazard Statements:	319, 315, 335
EUH Statements:	
Precautionary Statements:	261, 305+351+338
Signal Word:	Warning
ADR/RID:	



Lead acetate basic anhydrous

Chemical formula:	$(\text{CH}_3\text{COO})_2\text{Pb} \cdot \text{Pb}(\text{OH})_2$
Relative molecular weight:	566,5
CAS:	51404-69-4
EINECS:	215-630-3

A.G. (22680)

Appearance	white powder
Total lead content	min. 75,0 %
Basic lead content	min. 33,0 %
Loss on drying (105°C)	max. 1,0 %
Chloride (Cl^-)	max. 0,003 %
Fe (Iron)	max. 0,002 %

Hazard Statements:	351, 360Df, 373, 410
EUH Statements:	
Precautionary Statements:	201, 273, 281, 308+313, 314
Signal Word:	Danger
ADR/RID:	UN 1616 6.1 /T5 /III



D-Lactose monohydrate

Chemical formula:	$\text{C}_{12}\text{H}_{22}\text{O}_{11} \cdot \text{H}_2\text{O}$
Relative molecular weight:	360,32
CAS:	64044-51-5
EINECS:	200-559-2

A.G. (20800)

Appearance	white powder
Assay	min. 99,0 %
Melting point	207 - 210 °C
Sulphated ash	max. 0,05 %
$[\alpha]_{\text{D}20}$ (c = 10 in water)	+52,5 +/- 0,5 °
Fe (Iron)	max. 0,001 %
Heavy metals (as Pb)	max. 0,001 %
pH of 0,5M solution, 25 °C	3,5 - 6,0

pure (20790)

Appearance	white powder
Assay	min. 99,0 %
Melting point	207 - 210 °C
$[\alpha]_{\text{D}20}$ (c = 10 in water)	+52,5 +/- 0,5 °

DL-Lactic acid

Chemical formula:	$\text{CH}_3\text{CH}(\text{OH})\text{COOH}$
Relative molecular weight:	90,08
CAS:	50-21-5
EINECS:	200-018-0

pure (30290)

Appearance	clear colourless liquid
Assay	85,0 - 90,0 %
Density (20 °C)	1,210 g/cm ³
Refractive index	1,428

Hazard Statements:	315, 318
EUH Statements:	
Precautionary Statements:	305+351+338, 280
Signal Word:	Danger
ADR/RID:	



L

Lead acetate trihydrate

Chemical formula:	(CH ₃ COO) ₂ Pb · 3 H ₂ O
Relative molecular weight:	379,33
CAS:	6080-56-4
EINECS:	206-104-4

[A.G. \(22670\)](#)

Appearance	white crystalline substance
Assay	min. 99,5 %
Insoluble matter in water	max. 0,005 %
Chloride (Cl ⁻)	max. 0,001 %
Fe (Iron)	max. 0,001 %

[pure \(22660\)](#)

Appearance	white crystalline substance
Assay	min. 99,0 %
Insoluble matter in water	max. 0,005 %
Chloride (Cl ⁻)	max. 0,001 %
Fe (Iron)	max. 0,001 %

Hazard Statements:	360Df, 373, 410
EUH Statements:	
Precautionary Statements:	201, 273, 308+313, 314
Signal Word:	Danger
ADR/RID:	UN 1616 6.1 / T5 / III



Lead(II) carbonate basic precipitated

Chemical formula:	
Relative molecular weight:	
CAS:	598-63-0
EINECS:	209-943-4

[pure \(27970\)](#)

Appearance	white powder
Assay (Pb)	min. 77,0 %
Soluble substances in water	max. 0,5 %
Chloride (Cl ⁻)	max. 0,03 %
Fe (Iron)	max. 0,005 %

Hazard Statements:	302+332, 360Df, 373, 410
EUH Statements:	
Precautionary Statements:	201, 273, 308+313
Signal Word:	Danger
ADR/RID:	UN 2291 6.1 / T5 / III



Lead(II) chloride

Chemical formula:	PbCl ₂
Relative molecular weight:	278,1
CAS:	7758-95-4
EINECS:	231-845-5

[A.G. \(16540\)](#)

Appearance	white or almost white powder
Assay	min. 99,0 %
Insoluble matter in water	max. 0,05 %

[pure \(16530\)](#)

Appearance	white or almost white powder
Assay	min. 98,0 %

Hazard Statements:	332, 302, 360Df, 351, 372, 410
EUH Statements:	
Precautionary Statements:	201, 273, 308+313
Signal Word:	Danger
ADR/RID:	UN 2291 6.1 / T5 / III



Lead(II) nitrate

Chemical formula:	Pb(NO ₃) ₂
Relative molecular weight:	331,2
CAS:	10099-74-8
EINECS:	233-245-9

A.G. (13190)

Assay	min. 99,0 %
Insoluble matter in water	max. 0,005 %
Chloride (Cl ⁻)	max. 0,005 %
Fe (Iron)	max. 0,005 %

pure (13180)

Assay	min. 99,0 %
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A.G. (13190)

Appearance	white crystalline substance
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pure (13180)

Appearance	white crystalline substance
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Hazard Statements:	272, 332, 302, 317, 318, 360Df, 372, 400, 410
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EUH Statements:	
Precautionary Statements:	201, 273, 280, 305+351+338, 308+313
Signal Word:	Danger
ADR/RID:	UN 1469 5.1 /OT2 /II



Lead(II) oxide yellow

Chemical formula:	PbO
Relative molecular weight:	223,19
CAS:	1317-36-8
EINECS:	215-267-0

A.G. (23380)

Appearance	orange substance
Assay	min. 99,0 %
Total nitrogen (as N)	max. 0,001 %
Chloride (Cl ⁻)	max. 0,002 %
Fe (Iron)	max. 0,001 %

Hazard Statements:	360Df, 332, 302, 373, 410
EUH Statements:	
Precautionary Statements:	201, 273, 308+313
Signal Word:	Danger
ADR/RID:	UN 2291 6.1 /T5 /III



Lead(II) sulfate

Chemical formula:	PbSO ₄
Relative molecular weight:	303,25
CAS:	7446-14-2
EINECS:	231-198-9

pure (25730)

Appearance	almost white powder
Assay	min. 98,0 %

Hazard Statements:	360Df, 302, 332, 373, 410
EUH Statements:	
Precautionary Statements:	201, 273, 281, 308+313
Signal Word:	Danger
ADR/RID:	UN 3077 9 /M7 /III



L

Lepro 2

Chemical formula:
Relative molecular weight:
CAS:
EINECS:

[See below](#)

Density (20 °C)	0.816 - 0.821 g/cm ³
Appearance	clear colourless to slightly yellowish liquid

Hazard Statements:	225, 319
EUH Statements:	
Precautionary Statements:	210, 233
Signal Word:	Danger
ADR/RID:	UN 1993 3 /F1 /II



Lepro 4

Chemical formula:
Relative molecular weight:
CAS:
EINECS:

[See below \(41380\)](#)

Density (20 °C)	0.820 - 0.835 g/cm ³
Appearance	clear colourless to slightly yellowish liquid

Hazard Statements:	225, 315, 318
EUH Statements:	
Precautionary Statements:	210, 233, 280, 305+351+338
Signal Word:	Danger
ADR/RID:	UN 1993 3 /F1 /II



Lepro 8

Chemical formula:
Relative molecular weight:
CAS:
EINECS:

[See below \(41400\)](#)

Density (20 °C)	0,851 ± 0,006 g/cm ³
Appearance	clear colourless to slightly yellowish liquid

Hazard Statements:	225, 314
EUH Statements:	
Precautionary Statements:	210, 233, 260, 280, 305+351+338
Signal Word:	Danger
ADR/RID:	UN 2924 3 /FC /II



Lithium carbonate

Chemical formula:	Li ₂ CO ₃
Relative molecular weight:	73,89
CAS:	554-13-2
EINECS:	209-062-5

A.G. (30440)

Appearance	white powder
Assay	min. 99,0 %
Chloride (Cl ⁻)	max. 0,005 %
Sulfate (SO ₄ ²⁻)	max. 0,01 %
Fe (Iron)	max. 0,005 %
Heavy metals (as Pb)	max. 0,005 %

pure (27870)

Appearance	white powder
Assay	min. 99,0 %
Hazard Statements:	302, 319
EUH Statements:	
Precautionary Statements:	280, 305+351+338
Signal Word:	Warning
ADR/RID:	



Lithium hydroxide monohydrate

Chemical formula:	LiOH · H ₂ O
Relative molecular weight:	41,96
CAS:	1310-66-3
EINECS:	215-183-4

A.G. (15580)

Appearance	white crystalline substance
Assay	min. 99,0 %
Li ₂ CO ₃	max. 1,0 %
Sulfate (SO ₄ ²⁻)	max. 0,05 %
Fe (Iron)	max. 0,005 %
Heavy metals (as Pb)	max. 0,005 %

pure (15570)

Appearance	white crystalline substance
Assay	min. 99,0 %
Li ₂ CO ₃	max. 1,0 %
Hazard Statements:	302, 314
EUH Statements:	
Precautionary Statements:	280, 305+351+338, 310
Signal Word:	Danger
ADR/RID:	UN 2680 8 /C6 /II



Lithium chloride anhydrous

Chemical formula:	LiCl
Relative molecular weight:	42,39
CAS:	7447-41-8
EINECS:	231-212-3

A.G. (16420)

Appearance	white crystalline substance
Assay	min. 98,0 %
Loss on drying (110°C)	max. 2,0 %
Fe (Iron)	max. 0,005 %
Pb (Lead)	max. 0,005 %

pure (16410)

Appearance	white crystalline substance
Assay	min. 98,0 %
Hazard Statements:	302, 315, 319
EUH Statements:	
Precautionary Statements:	261, 281, 305+351+338
Signal Word:	Warning
ADR/RID:	



L

Lithium sulfate monohydrate

Chemical formula:	Li ₂ SO ₄ · H ₂ O
Relative molecular weight:	127,9
CAS:	10102-25-7
EINECS:	233-820-4

[A.G. \(25600\)](#)

Appearance	white crystalline substance
Assay	min. 99,0 %
Chloride (Cl ⁻)	max. 0,005 %
Fe (Iron)	max. 0,005 %
Heavy metals (as Pb)	max. 0,005 %

[pure \(25590\)](#)

Appearance	white crystalline substance
Assay	min. 99,0 %

Hazard Statements: 302

EUH Statements:

Precautionary Statements:

Signal Word: Warning

ADR/RID:



L-Lysine

Chemical formula:	C ₆ H ₁₄ N ₂ O ₂
Relative molecular weight:	146,19
CAS:	56-87-1
EINECS:	200-294-2

[pure \(30320\)](#)

Appearance	almost white powder
Assay	min. 98,0 %
Melting point	~ 215 °C
Water	max. 1,0 %

Magnesium acc. to Grignard

Chemical formula:	Mg
Relative molecular weight:	24,31
CAS:	7439-95-4
EINECS:	231-104-6

99,8%+99,8%+(14850)

Appearance	metallic shiny shavings
Assay	min. 99,0 %
Insoluble matter in HCl	max. 0,05 %
Fe (Iron)	max. 0,05 %

Hazard Statements: 228, 261, 252

EUH Statements:

Precautionary Statements: 370+378, 402+404, 420

Signal Word: Danger

ADR/RID: UN 1869 4.1 /F3 /III



Magnesium carbonate basic light

Chemical formula:	
Relative molecular weight:	
CAS:	39409-82-0
EINECS:	235-192-7

A.G. (27850)

Appearance	white powder
Assay (MgO)	min. 40,0 %
Chloride (Cl ⁻)	max. 0,01 %
Sulfate (SO ₄ ²⁻)	max. 0,6 %
Pb (Lead)	max. 0,005 %

pure (27830)

Appearance	white powder
Assay (MgO)	min. 40,0 %

Magnesium chloride hexahydrate

Chemical formula:	MgCl ₂ · 6 H ₂ O
Relative molecular weight:	203,31
CAS:	7791-18-6
EINECS:	232-094-6

A.G. (16330)

Appearance	white crystalline substance
Assay	min. 99,0 %
Sulfate (SO ₄ ²⁻)	max. 0,002 %
Fe (Iron)	max. 0,001 %
Heavy metals (as Pb)	max. 0,001 %
pH (5% water solution)	5,0 - 6,5

M

Magnesium nitrate hexahydrate

Chemical formula:	Mg(NO ₃) ₂ · 6 H ₂ O
Relative molecular weight:	256,41
CAS:	13446-18-9
EINECS:	233-826-7

A.G. (13020)

Appearance	white crystalline substance
Assay	min. 99,0 %
pH (5% water solution, 20 °C)	5,0 - 7,0
Chloride (Cl ⁻)	max. 0,001 %
Sulfate (SO ₄ ²⁻)	max. 0,005 %
Fe (Iron)	max. 0,001 %
Heavy metals (as Pb)	max. 0,001 %

pure (13010)

Appearance	white crystalline substance
Assay	min. 99,0 %

99%+ (39860)

Appearance	white crystalline substance
Assay	min. 99,0 %
pH (5% water solution, 20 °C)	5,0 - 7,0
Chloride (Cl ⁻)	max. 0,01 %
Sulfate (SO ₄ ²⁻)	max. 0,05 %
Fe (Iron)	max. 0,001 %
Heavy metals (as Pb)	max. 0,001 %

Hazard Statements:	319
EUH Statements:	
Precautionary Statements:	305+351+338
Signal Word:	Warning
ADR/RID:	UN 1474 5.1 /O2 /III



Magnesium oxide heavy

Chemical formula:	MgO
Relative molecular weight:	40,31
CAS:	1309-48-4
EINECS:	215-171-9

A.G. (23200)

Appearance	white powder
Assay (on ignition subst.)	min. 98,0 %
Loss on ignition (900°C)	max. 5,0 %
Chloride (Cl ⁻)	max. 0,1 %
Sulfate (SO ₄ ²⁻)	max. 0,5 %
Ca (Calcium)	max. 0,5 %
Fe (Iron)	max. 0,05 %
Heavy metals (as Pb)	max. 0,001 %

Magnesium oxide light

Chemical formula:	MgO
Relative molecular weight:	40,31
CAS:	1309-48-4
EINECS:	215-171-9

A.G. (23190)

Appearance	white powder
Assay (on ignition subst.)	min. 98,0 %
Loss on ignition (900°C)	max. 5,0 %
Chloride (Cl ⁻)	max. 0,1 %
Sulfate (SO ₄ ²⁻)	max. 0,2 %
Ca (Calcium)	max. 1,0 %
Fe (Iron)	max. 0,01 %
Heavy metals (as Pb)	max. 0,005 %

Magnesium sulfate anhydrous

Chemical formula:
Relative molecular weight:
CAS:
EINECS:

[See below](#)

Appearance	white powder
Assay	min. 98,0 %
Loss on ignition (500°C)	max. 2,0 %
Chloride (Cl ⁻)	max. 0,015 %
Fe (Iron)	max. 0,001 %
Pb (Lead)	max. 0,001 %

Magnesium sulfate heptahydrate

Chemical formula: $\text{MgSO}_4 \cdot 7 \text{H}_2\text{O}$
Relative molecular weight:
246,48
CAS: 10034-99-8
EINECS: 231-298-2

[A.G. \(25520\)](#)

Appearance	white crystalline substance
Assay	min. 99,0 %
pH (5% water solution)	5,0 - 8,0
Chloride (Cl ⁻)	max. 0,03 %
Fe (Iron)	max. 0,002 %
Heavy metals (as Pb)	max. 0,001 %

[tested acc. to Ph. Eur.](#)

Appearance	white crystalline substance
Assay	99,0 - 100,5 %
Loss on drying	48,0 - 52,0 %
Chloride (Cl ⁻)	max. 0,03 %
As (Arsenic)	max. 0,0002 %
Fe (Iron)	max. 0,002 %
Heavy metals (as Pb)	max. 0,001 %

Hazard Statements:
EUH Statements:
Precautionary Statements: 260, 262
Signal Word: Warning
ADR/RID:

Maleic acid

Chemical formula: $\text{HOOCCH}:\text{CHCOOH}$
Relative molecular weight: 116,08
CAS: 110-16-7
EINECS: 203-742-5

[A.G. \(19780\)](#)

Appearance	white crystalline substance
Assay	min. 99,0 %
Melting point	137 - 140 °C

[pure \(19770\)](#)

Appearance	white crystalline substance
Assay	min. 98,0 %
Melting point	137 - 140 °C

Hazard Statements: 302, 312, 315, 317, 318, 335, 412
EUH Statements:
Precautionary Statements: 261, 280, 305+351+338
Signal Word: Danger
ADR/RID:



M

Manganese sulfate monohydrate

Chemical formula:	MnSO ₄ · H ₂ O
Relative molecular weight:	169
CAS:	10034-96-5
EINECS:	232-089-9

A.G. (25620)

Appearance	light pink powder
Assay	min. 99,0 %
Insoluble matter in water	max. 0,005 %
Chloride (Cl ⁻)	max. 0,005 %
Fe (Iron)	max. 0,001 %
Heavy metals (as Pb)	max. 0,001 %

pure (25610)

Appearance	light pink powder
Assay	min. 98,0 %
Hazard Statements:	373, 411
EUH Statements:	
Precautionary Statements:	273
Signal Word:	Warning
ADR/RID:	UN 3077 9 /M7 /III



Manganese(II) carbonate hydrate

Chemical formula:	MnCO ₃ · xH ₂ O
Relative molecular weight:	114,95
CAS:	34156-69-9
EINECS:	208-915-9

pure (27880)

Appearance	brown powder
Assay (Mn)	44,0 - 46,0 %
Loss on drying (105°C)	max. 3,0 %
Na (Sodium)	max. 0,2 %

Manganese(II) chloride tetrahydrate

Chemical formula:	MnCl ₂ · 4 H ₂ O
Relative molecular weight:	197,91
CAS:	13446-34-9
EINECS:	231-869-6

A.G. (16440)

Appearance	pink crystalline substance
Assay	min. 99,0 %
Insoluble matter in water	max. 0,005 %
Sulfate (SO ₄ ²⁻)	max. 0,005 %
Fe (Iron)	max. 0,005 %
Heavy metals (as Pb)	max. 0,005 %
pH (5% water solution)	4,0 - 6,0

pure (16430)

Appearance	pink crystalline substance
Assay	min. 98,5 %
Hazard Statements:	302, 412
EUH Statements:	
Precautionary Statements:	273
Signal Word:	Warning
ADR/RID:	



Manganese(II) nitrate tetrahydrate

Chemical formula:	Mn(NO ₃) ₂ · 4 H ₂ O
Relative molecular weight:	251,01
CAS:	20694-39-7
EINECS:	233-828-8

A.G. (13110)

Appearance	pink crystalline substance
Assay	min. 97,0 %
Chloride (Cl ⁻)	max. 0,001 %
Sulfate (SO ₄ ²⁻)	max. 0,005 %
Fe (Iron)	max. 0,005 %
Heavy metals (as Pb)	max. 0,005 %

Hazard Statements:	272, 302, 314, 373, 412
EUH Statements:	071
Precautionary Statements:	220, 261, 305+351+338, 273, 280
Signal Word:	Danger
ADR/RID:	UN 2724 5.1 /O2 /III



Manganese(IV) oxide

Chemical formula:	MnO ₂
Relative molecular weight:	86,94
CAS:	1313-13-9
EINECS:	215-202-6

pure (23310)

Appearance	black powder
Assay	min. 90,0 %
Loss on drying (105°C)	max. 0,3 %
Insoluble matter in HCl	max. 3,5 %
Fe (Iron)	max. 0,5 %

Hazard Statements:	302, 332, 373
EUH Statements:	
Precautionary Statements:	261, 314
Signal Word:	Warning
ADR/RID:	



D-Mannitol

Chemical formula:	C ₆ H ₁₄ O ₆
Relative molecular weight:	182,18
CAS:	69-65-8
EINECS:	200-711-8

A.G. (12820)

Appearance	white powder
Assay	min. 99,0 %
Melting point	165 - 168 °C
[α] _D 20 (c = 10 in Na ₂ B ₄ O ₇)	+23 až +25 °

See below (37820)

Appearance	white powder
Assay	min. 97,0 %
Melting point	165 - 168 °C
[α] _D 20 (c = 10 in Na ₂ B ₄ O ₇)	+23 až +25 °

Mercury

Chemical formula:	Hg
Relative molecular weight:	200,59
CAS:	7439-97-6
EINECS:	231-106-7

A.G. (24900)

Appearance	silver liquid
Assay	min. 99,99 %
Residue after evaporation	max. 0,001 %

Hazard Statements:	360D, 330, 372, 410
EUH Statements:	
Precautionary Statements:	201, 273, 280, 310
Signal Word:	Danger
ADR/RID:	UN 2809 8 /CT1 /III



M

Mercury(II) chloride

Chemical formula:	HgCl ₂
Relative molecular weight:	271,5
CAS:	7487-94-7
EINECS:	231-299-8

A.G. (16570)

Appearance	white crystalline substance
Assay	min. 99,5 %
Fe (Iron)	max. 0,002 %
Solubility in diethylether	passes test

pure (16560)

Appearance	white crystalline substance
Assay	min. 99,0 %
Fe (Iron)	max. 0,005 %

Hazard Statements:	341, 361f, 300, 314, 372, 410
EUH Statements:	
Precautionary Statements:	273, 280, 305+351+338, 301+310
Signal Word:	Danger
ADR/RID:	UN 1624 6.1 /T5 /II



Mercury(II) iodide red

Chemical formula:	HgI ₂
Relative molecular weight:	454,4
CAS:	7774-29-0
EINECS:	231-873-8

A.G. (17680)

Appearance	red powder
Assay	min. 99,0 %
Ash	max. 0,04 %
Insoluble matter in solution KCl	max. 0,02 %
Mercury salts soluble in water (as Hg ²⁺)	max. 0,05 %
Hg ⁺ salts	max. 0,1 %

pure (30830)

Appearance	red powder
Assay	min. 99,0 %

Hazard Statements:	330, 310, 300, 373, 410
EUH Statements:	
Precautionary Statements:	302+352, 310, 273, 280
Signal Word:	Danger
ADR/RID:	UN 1638 6.1 /T5 /II



Mercury(II) nitrate hydrate

Chemical formula:	Hg(NO ₃) ₂ · x H ₂ O
Relative molecular weight:	
CAS:	7783-34-8
EINECS:	

A.G. (13210)

Assay (as monohydrate)	min. 99,0 %
Chloride (Cl ⁻)	max. 0,005 %
Sulfate (SO ₄ ²⁻)	max. 0,005 %
Residue after evaporation	max. 0,02 %
Appearance	white crystalline substance

Hazard Statements:	330, 310, 300, 373, 410
EUH Statements:	
Precautionary Statements:	302+350, 280, 273, 308+311
Signal Word:	Danger
ADR/RID:	UN 1625 6.1 /T5 /II



Mercury(II) oxide red

Chemical formula:	HgO
Relative molecular weight:	216,59
CAS:	21908-53-2
EINECS:	244-654-7

A.G. (23390)

Appearance	orange powder
Assay	min. 99,0 %
Chloride (Cl ⁻)	max. 0,01 %
Sulfate (SO ₄ ²⁻)	max. 0,005 %
Hazard Statements:	330, 310, 300, 373, 410
EUH Statements:	
Precautionary Statements:	264, 273, 280, 301+310
Signal Word:	Danger
ADR/RID:	UN 1641 6.1 / T5 / II



Mercury(II) oxide yellow

Chemical formula:	HgO
Relative molecular weight:	216,59
CAS:	21908-53-2
EINECS:	244-654-7

A.G. (23400)

Appearance	orange powder
Assay	min. 99,0 %
Chloride (Cl ⁻)	max. 0,02 %
Sulfate (SO ₄ ²⁻)	max. 0,005 %
Hazard Statements:	330, 310, 300, 373, 410
EUH Statements:	
Precautionary Statements:	264, 273, 280, 301+310
Signal Word:	Danger
ADR/RID:	UN 1641 6.1 / T5 / II



Mercury(II) sulfate

Chemical formula:	HgSO ₄
Relative molecular weight:	296,65
CAS:	7783-35-9
EINECS:	231-992-5

A.G. (25740)

Appearance	white powder
Assay	min. 99,0 %
Chloride (Cl ⁻)	max. 0,005 %
Nitrate (NO ₃ ⁻)	max. 0,05 %
Fe (Iron)	max. 0,005 %
Hazard Statements:	330, 310, 300, 373, 410
EUH Statements:	
Precautionary Statements:	280, 273, 284, 308+311
Signal Word:	Danger
ADR/RID:	UN 1645 6.1 / T5 / II



M

2-Methoxyethanol

Chemical formula:	C ₃ H ₈ O ₂
Relative molecular weight:	76,1
CAS:	109-86-4
EINECS:	203-713-7

A.G. (29250)

Appearance	clear colourless liquid
Assay	min. 99,5 %
Color scale (APHA)	max. 10
Free acid	max. 0,002 meq/g
Residue after evaporation	max. 0,002 %
Water	max. 0,1 %
Peroxides	max. 20 ppm

pure (29240)

Appearance	clear colourless liquid
Assay	min. 99,0 %
Boiling point	122 - 124 °C
Density (20 °C)	0,965 g/cm ³
Refractive index	1,403
Flash point	40 °C

Hazard Statements:	226, 302, 312, 332, 360FD
EUH Statements:	
Precautionary Statements:	201, 280, 308+313
Signal Word:	Danger
ADR/RID:	UN 1188 3 /F1 /III



Methyl acetate

Chemical formula:	C ₃ H ₆ O ₂
Relative molecular weight:	74,08
CAS:	79-20-9
EINECS:	201-185-2

A.G. (21330)

Appearance	clear colourless liquid
Assay	min. 99,5 %
Residue after evaporation	max. 0,001 %
Acidity (as CH ₃ COOH)	max. 0,005 %
Water	max. 0,1 %
Boiling point	56 - 58 °C
Fe (Iron)	max. 0,0001 %
Heavy metals (as Pb)	max. 0,0001 %
Density (20 °C)	0,934 g/cm ³
Refractive index	1,362

pure (21320)

Appearance	clear colourless liquid
Assay	min. 99,0 %
Boiling point	56 - 58 °C
Density (20 °C)	0,934 g/cm ³
Refractive index	1,362

Hazard Statements:	225, 319, 336
EUH Statements:	066
Precautionary Statements:	210, 240, 261, 305+351+338
Signal Word:	Danger
ADR/RID:	UN 1231 3 /F1 /II



Methyl alcohol

Chemical formula:	CH ₃ OH
Relative molecular weight:	32,04
CAS:	67-56-1
EINECS:	200-659-6

A.G. (21210)

Appearance	clear colourless liquid
Assay	min. 99,8 %
Residue after evaporation	max. 0,001 %
Acidity (as HCOOH)	max. 0,002 %
Water	max. 0,08 %
Boiling point	64 - 65 °C
Density (20 °C)	0,791 g/cm ³
Refractive index	1,329
Flash point	11 °C

pure (21190)

Appearance	clear colourless liquid
Assay	min. 99,5 %
Residue after evaporation	max. 0,005 %
Water	max. 0,15 %
Boiling point	63 - 65 °C
Density (20 °C)	0,791 g/cm ³
Refractive index	1,329
Flash point	11 °C

for HPLC (21230)

Appearance	clear colourless liquid
Assay	min. 99,9 %
Residue after evaporation	max. 0,0005 %
Water	max. 0,03 %
Density (20 °C)	0,791 g/cm ³
Refractive index	1,329
Free acids	max. 0,0002 meq/g
Free alkali	max. 0,0002 meq/g
Infrared spectrometry	passes test
UV absorption at 210 nm	max. 0,50
UV absorption at 220 nm	max. 0,30
UV absorption at 235 nm	max. 0,10
UV absorption at 260 nm	max. 0,01

for UV (21240)

Appearance	clear colourless liquid
Assay	min. 99,9 %
Residue after evaporation	max. 0,001 %
Water	max. 0,1 %
Density (20 °C)	0,791 g/cm ³
Refractive index	1,329
Acetaldehyde	max. 0,001 %
Acetone	max. 0,001 %
Formaldehyde	max. 0,001 %
Color scale (APHA)	max. 10
Free acids	max. 0,0003 meq/g
Free alkali	max. 0,0002 meq/g
Substances reducing KMnO ₄	passes test
Infrared spectrometry	passes test
UV absorption at 205 nm	max. 1,00
UV absorption at 210 nm	max. 0,80
UV absorption at 220 nm	max. 0,40
UV absorption at 230 nm	max. 0,20
UV absorption at 240 nm	max. 0,10
UV absorption at 260 nm	max. 0,04
UV absorption at 280 to 400 nm	max. 0,01
Hazard Statements:	225, 331, 311, 301, 370
EUH Statements:	
Precautionary Statements:	210, 233, 260, 280, 301+310, 308+311
Signal Word:	Danger
ADR/RID:	UN 1230 3 /FT1 /II



Methyl Blue

Chemical formula:	C ₃₇ H ₂₇ N ₃ Na ₂ O ₉ S ₃
Relative molecular weight:	799,82
CAS:	28983-56-4
EINECS:	249-352-9

indicator (21590)

Appearance	dark blue powder
C. I. No.	42780
Functional test	passes test
Hazard Statements:	302, 319, 315, 335
EUH Statements:	
Precautionary Statements:	261, 305+351+338
Signal Word:	Warning
ADR/RID:	



Methyl ethyl ketone

Chemical formula:	C ₂ H ₅ COCH ₃
Relative molecular weight:	72,11
CAS:	78-93-3
EINECS:	201-159-0

A.G. (13750)

Appearance	clear colourless liquid
Assay	min. 99,0 %
Water	max. 0,1 %
Residue after evaporation	max. 0,002 %
Boiling point	79 - 80 °C
Density (20 °C)	0,804 g/cm ³
Refractive index	1,379
Flash point	-1

pure (27510)

Appearance	clear colourless liquid
Assay	min. 99,0 %

technical (37520)

Appearance	clear colourless liquid
Assay	min. 98,5 %
Hazard Statements:	225, 319, 336
EUH Statements:	
Precautionary Statements:	210, 403+233, 305+351+338
Signal Word:	Danger
ADR/RID:	UN 1193 3 /F1 /II



M

Methylene Blue hydrate

Chemical formula:	$C_{16}H_{18}ClN_3S \cdot aq$
Relative molecular weight:	
CAS:	122965-43-9
EINECS:	200-515-2

A.G. (21580)

Appearance	dark green powder
C. I. No.	52015
Assay (dried substance)	min. 95,0 %
Insoluble matter in ethanol	max. 1,0 %
Loss on drying (105°C)	max. 22,0 %
Sulphated ash	max. 1,0 %

Hazard Statements:	302
EUH Statements:	
Precautionary Statements:	
Signal Word:	Warning
ADR/RID:	



Metol

Chemical formula:	$C_{14}H_{18}N_2O_2 \cdot H_2SO_4$
Relative molecular weight:	344,39
CAS:	55-55-0
EINECS:	200-237-1

A.G. (21350)

Appearance	light beige powder
Assay	min. 99,0 %
Loss on drying	max. 0,3 %

for photo (21360)

Appearance	almost white powder
Assay	min. 99,0 %
Aminophenol	max. 1,0 %

Hazard Statements:	302, 373, 317, 410
EUH Statements:	
Precautionary Statements:	261, 273, 280, 314
Signal Word:	Warning
ADR/RID:	UN 3077 9 /M7 /III



4-Methyl-2-pentanone

Chemical formula:	$(CH_3)_2CHCH_2COCH_3$
Relative molecular weight:	100,16
CAS:	108-10-1
EINECS:	203-550-1

A.G. (17370)

Appearance	clear colourless liquid
Assay	min. 99,0 %
Residue after evaporation	max. 0,001 %
Acidity (as CH_3COOH)	max. 0,01 %
Water	max. 0,1 %
Boiling point	115 - 117 °C
Density (20 °C)	0,800 g/cm ³
Refractive index	1,396
Flash point	14 °C

pure (17360)

Appearance	clear colourless liquid
Assay	min. 98,5 %
Boiling point	115 - 117 °C
Density (20 °C)	0,801 g/cm ³
Refractive index	1,396
Flash point	14 °C

Hazard Statements:	225, 332, 319, 335
EUH Statements:	
Precautionary Statements:	210, 261, 305+351+338, 304+340
Signal Word:	Danger
ADR/RID:	UN 1245 3 /F1 /II



Morpholine

Chemical formula:	C ₄ H ₉ NO
Relative molecular weight:	87,12
CAS:	110-91-8
EINECS:	203-815-1

[A.G. \(30340\)](#)

Appearance	clear slightly yellowish liquid
Assay	min. 99,0 %
Boiling point	124 - 128 °C
Density (20 °C)	1,000 g/cm ³
Refractive index	1,455
Flash point	31 °C

[pure \(21790\)](#)

Appearance	clear slightly yellowish liquid
Assay	min. 95,5 %

Hazard Statements: 226, 332, 312, 302, 314

EUH Statements:

Precautionary Statements: 280, 305+351+338, 310

Signal Word: Danger

ADR/RID: UN 2054 8 /CF1 /I



N

1-Naphthol

Chemical formula:	C ₁₀ H ₇ OH
Relative molecular weight:	144,18
CAS:	90-15-3
EINECS:	201-969-4

A.G. (28990)

Appearance	pinkish scales
Assay	min. 99,0 %
Sulphated ash	max. 0,05 %
Melting point	94 - 97 °C
Flash point	125 °C

Hazard Statements:	312, 302, 335, 315, 318
EUH Statements:	
Precautionary Statements:	281, 261, 305+351+338
Signal Word:	Danger
ADR/RID:	UN 2811 6.1 /T2 /III



1-Naphthylamine

Chemical formula:	C ₁₀ H ₇ NH ₂
Relative molecular weight:	143,19
CAS:	134-32-7
EINECS:	205-138-7

A.G. (29000)

Appearance	light purple crystals
Assay	min. 99,0 %
Melting point	47 - 50 °C
Heavy metals	max. 0,001 %

pure (30350)

Appearance	light purple crystals
Melting point	47 - 50 °C

Hazard Statements:	302, 350, 411
EUH Statements:	
Precautionary Statements:	201, 273, 308+313
Signal Word:	Danger
ADR/RID:	UN 2077 6.1 /T2 /III



N-(1-Naphthyl)ethylenediamine dihydrochloride

Chemical formula:	C ₁₀ H ₇ NHCH ₂ CH ₂ NH ₂ · 2 HCl
Relative molecular weight:	259,18
CAS:	1465-25-4
EINECS:	215-981-2

A.G. (21930)

Appearance	almost white powder
Assay (dried substance)	min. 97,0 %
Water	max. 5,0 %
Infrared spectrometry	passes test

Hazard Statements:	315, 319, 335
EUH Statements:	
Precautionary Statements:	261, 305+351+338
Signal Word:	Warning
ADR/RID:	



Naphthalene

Chemical formula:	C ₁₀ H ₈
Relative molecular weight:	128,18
CAS:	91-20-3
EINECS:	202-049-5

A.G. (22040)

Appearance	white crystalline substance
Assay	min. 99,0 %
Melting point	79 - 81 °C
Infrared spectrometry	passes test
Flash point	80 °C

Hazard Statements: 228, 302, 351,410

EUH Statements:

Precautionary Statements: 280, 273

Signal Word: Warning

ADR/RID: UN 1334 4.1 /F1 /III



NERO neutralising solution

Chemical formula:	
Relative molecular weight:	
CAS:	
EINECS:	

See below (41330)

Appearance	clear colourless liquid
Density (20 °C)	891 g /cm ³
Hazard Statements:	225, 315, 317, 319, 331
EUH Statements:	
Precautionary Statements:	210, 280, 304+340, 311, 370+378, 403+233

Signal Word:

Danger

ADR/RID:

UN 1992 3 /FT1 /II



Nickel (II) chloride hexahydrate

Chemical formula:	NiCl ₂ · 6 H ₂ O
Relative molecular weight:	237,71
CAS:	7791-20-0
EINECS:	231-743-0

A.G. (16520)

Appearance	green crystalline substance
Assay	min. 98,0 %
Sulfate (SO ₄ ²⁻)	max. 0,02 %
Fe (Iron)	max. 0,005 %
Pb (Lead)	max. 0,005 %
pH (5% water solution)	4,0 - 7,0

pure (16510)

Appearance	green crystalline substance
Assay	min. 97,0 %

97%+ (39910)

Appearance	green crystalline substance
Assay	min. 97,0 %
Sulfate (SO ₄ ²⁻)	max. 0,05 %
Fe (Iron)	max. 0,005 %
Pb (Lead)	max. 0,005 %
pH (5% water solution)	4,0 - 7,0

Hazard Statements: 350i, 341, 360D, 331, 334, 372, 301, 315, 317, 410

EUH Statements:

Precautionary Statements: 201, 261, 280, 273, 308+313, 301+310

Signal Word: Danger

ADR/RID: UN 3288 6.1 /T5 /III



N

Nickel(II) carbonate basic hydrate

Chemical formula:	$\sim \text{NiCO}_3 \cdot 2\text{Ni}(\text{OH})_2 \cdot x\text{H}_2\text{O}$
Relative molecular weight:	
CAS:	12607-70-4
EINECS:	235-715-9

[pure \(27940\)](#)

Appearance	light green powder
Assay (Ni)	44,5 - 50,0 %
Na (Sodium)	max. 0,5 %
Hazard Statements:	302, 330, 315, 317, 319, 334, 341, 350i, 360D, 372, 400, 410
EUH Statements:	
Precautionary Statements:	201, 273, 280, 304+340, 308+313, 305+351+338
Signal Word:	Danger
ADR/RID:	UN 3288 6.1 /T5 /II



Nickel(II) nitrate hexahydrate

Chemical formula:	$\text{Ni}(\text{NO}_3)_2 \cdot 6\text{H}_2\text{O}$
Relative molecular weight:	290,81
CAS:	13478-00-7
EINECS:	236-068-5

[A.G. \(13160\)](#)

Appearance	blue-green crystalline substance
Assay	min. 99,0 %
Chloride (Cl ⁻)	max. 0,005 %
Sulfate (SO ₄ ²⁻)	max. 0,005 %
Co (Cobalt)	max. 0,005 %

[pure \(13150\)](#)

Appearance	blue-green crystalline substance
Assay	min. 98,0 %

[99%+ \(42290\)](#)

Appearance	blue-green crystalline substance
Assay	min. 99,0 %
Chloride (Cl ⁻)	max. 0,005 %
Sulfate (SO ₄ ²⁻)	max. 0,005 %

Hazard Statements:	272, 350i, 341, 360D, 332, 302, 372, 334, 315, 317, 318, 410
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EUH Statements:	
Precautionary Statements:	201, 273, 280, 220, 308+313
Signal Word:	Danger
ADR/RID:	UN 2725 5.1 /O2 /III



Nickel(II) sulfate hexahydrate

Chemical formula:	$\text{NiSO}_4 \cdot 6\text{H}_2\text{O}$
Relative molecular weight:	262,86
CAS:	10101-97-0
EINECS:	232-104-9

[A.G. \(25720\)](#)

Appearance	turquoise crystalline substance
Assay	min. 99,0 %
Chloride (Cl ⁻)	max. 0,005 %
Fe (Iron)	max. 0,005 %
Pb (Lead)	max. 0,005 %

[pure \(25710\)](#)

Appearance	turquoise crystalline substance
Assay	min. 98,0 %

Hazard Statements:	350i, 341, 360D, 372, 332, 302, 315, 334, 317, 410
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EUH Statements:	
Precautionary Statements:	201, 280, 261, 273, 308+313
Signal Word:	Danger
ADR/RID:	UN 3288 6.1 /T5 /III



Ninhydrin

Chemical formula:	C ₉ H ₆ O ₄
Relative molecular weight:	178,14
CAS:	485-47-2
EINECS:	207-618-1

A.G. (22320)

Appearance	yellowish crystals
Assay	min. 98,0 %
Sulphated ash	max. 0,1 %

pure (22310)

Appearance	yellowish crystals
Assay	min. 98,0 %

Hazard Statements:	302, 319, 335, 315
EUH Statements:	
Precautionary Statements:	261, 305+351+338
Signal Word:	Warning
ADR/RID:	



Nitric acid 65%+

Chemical formula:	HNO ₃
Relative molecular weight:	63,01
CAS:	7697-37-2
EINECS:	231-714-2

semiconductor grade (18990)

Appearance	clear colourless liquid
Assay	min. 65,0 %
Sulphated ash	max. 0,0005 %
Chloride (Cl ⁻)	max. 0,0001 %
Sulfate (SO ₄ ²⁻)	max. 0,0002 %
Fe (Iron)	max. 0,00004 %
Heavy metals (as Pb)	max. 0,00005 %
Density (20 °C)	1,400 g/cm ³

A.G. (18980)

Appearance	clear colourless liquid
Assay	min. 65,0 %
Sulphated ash	max. 0,0005 %
Chloride (Cl ⁻)	max. 0,0001 %
Sulfate (SO ₄ ²⁻)	max. 0,0002 %
Fe (Iron)	max. 0,0001 %
Heavy metals (as Pb)	max. 0,0001 %
Density (20 °C)	1,400 g/cm ³

pure (18900)

Appearance	clear colourless liquid
Assay	min. 65,0 %
Sulphated ash	max. 0,015 %
Chloride (Cl ⁻)	max. 0,0005 %
Sulfate (SO ₄ ²⁻)	max. 0,002 %
Density (20 °C)	1,400 g/cm ³

Hazard Statements:	290, 272, 314, 331
EUH Statements:	071
Precautionary Statements:	260, 280, 305+351+338, 301+330+331, 303+361+353, 308+311
Signal Word:	Danger
ADR/RID:	UN 2031 8 /CO1 /II



Nitric acid 68-70%

Chemical formula:	
Relative molecular weight:	
CAS:	7697-37-2
EINECS:	

tested acc. to Ph. Eur.

Appearance	clear colourless liquid
Assay	68,0 - 70,0 %
Color scale (APHA)	max. 10
Identification A	passes test
Identification B	passes test
Appearance of solution	passes test
Chloride (Cl ⁻)	max. 0,5 µg/g
Sulfate (SO ₄ ²⁻)	max. 10 µg/g
Fe (Iron)	max. 10 µg/g
Sulphated ash	max. 0,01 %

for trace analysis (43410)

Appearance	clear colourless liquid
Assay	min. 69 %
Color scale (APHA)	max. 10
Chloride (Cl ⁻)	max. 0,00005 %
Sulfate (SO ₄ ²⁻)	max. 0,00005 %
Phosphate (PO ₄ ³⁻)	max. 0,00005 %
Sulphated ash	max. 0,0005 %
Heavy metals (as Pb)	max. 0,00002 %
As (Arsenic)	max. 0,000001 %
Ba (Barium)	max. 0,000001 %
Be (Beryllium)	max. 0,000001 %
Bi (Bismuth)	max. 0,000001 %
K (Potassium)	max. 0,00001 %
Ge (Germanium)	max. 0,000005 %
Al (Aluminum)	max. 0,000005 %
Mg (Magnesium)	max. 0,00001 %
Cr (Chromium)	max. 0,000002 %
Cd (Cadmium)	max. 0,000001 %
Co (Cobalt)	max. 0,000001 %
Li (Lithium)	max. 0,000001 %
Mn (Manganese)	max. 0,000001 %
Cu (Copper)	max. 0,000001 %
Mo (Molybdenum)	max. 0,000001 %
Ni (Nickel)	max. 0,000002 %
Pb (Lead)	max. 0,000001 %

N

Na (Sodium)	max. 0,00005 %
Sr (Strontium)	max. 0,000001 %
Ag (Silver)	max. 0,000001 %
Tl (Thallium)	max. 0,000005 %
Ti (Titanium)	max. 0,00001 %
V (Vanadium)	max. 0,000001 %
Ca (Calcium)	max. 0,00001 %
Zn (Zinc)	max. 0,000005 %
Zr (Zirconium)	max. 0,00001 %
Fe (Iron)	max. 0,00001 %
Hazard Statements:	272, 290, 314, 331
EUH Statements:	071
Precautionary Statements:	260, 280, 301+330+331, 303+361+353, 305+351+338, 308+311
Signal Word:	Danger
ADR/RID:	UN 2031 8 /CO1 /II



Nitric acid fuming

Chemical formula:	HNO ₃
Relative molecular weight:	63,01
CAS:	7697-37-2
EINECS:	231-714-2

[See below \(18960\)](#)

Appearance	clear colourless to yellow liquid
Assay	min. 98,5 %
Density (20 °C)	1,520 g/cm

Hazard Statements:	290, 272, 314, 331
EUH Statements:	071
Precautionary Statements:	260, 280, 305+351+338, 301+330+331, 303+361+353, 308+311

Signal Word:	Danger
ADR/RID:	UN 2032 8 /COT /I



Nitric acid solution 10% in water

Chemical formula:	
Relative molecular weight:	
CAS:	7697-37-2
EINECS:	231-714-2

[See below](#)

Appearance	clear colourless liquid
Density (20 °C)	1,0493 - 1,0593 g/cm ³

Hazard Statements:	314
EUH Statements:	
Precautionary Statements:	260-280-301+330+331, 303+361+353, 305+351+338

Signal Word:	Danger
ADR/RID:	UN 2031 8 /C1 /II



Nitric acid solution 25% in water

Chemical formula:	HNO ₃
Relative molecular weight:	63,01
CAS:	7697-37-2
EINECS:	231-714-2

pure (18930)

Appearance	clear colourless liquid
Density (20 °C)	1,1389 - 1,1549 g/cm ³

technical (19000)

Appearance	clear colourless liquid
Density (20 °C)	1,1389 - 1,1549 g/cm ³

Hazard Statements:	314, 332
EUH Statements:	
Precautionary Statements:	260, 280, 301+330+331, 305+351+338
Signal Word:	Danger
ADR/RID:	UN 2031 8 /C1 /II



Nitric acid solution 29-31% in water

Chemical formula:	HNO ₃
Relative molecular weight:	63,01
CAS:	7697-37-2
EINECS:	231-714-2

pure (36400)

Appearance	clear colourless liquid
Density (20 °C)	1,1740 - 1,1860 g/cm ³

Hazard Statements:	290, 314, 331
EUH Statements:	071
Precautionary Statements:	260, 280, 305+351+338, 301+330+331, 303+361+353, 308+311

Signal Word:	Danger
ADR/RID:	UN 2031 8 /C1 /II



Nitric acid solution 50% in water

Chemical formula:	HNO ₃
Relative molecular weight:	63,01
CAS:	7697-37-2
EINECS:	231-714-2

technical (19010)

Assay	47 - 53%
Chloride (Cl ⁻)	<10 ppm
Appearance	clear colourless liquid

Hazard Statements:	290, 314, 331
EUH Statements:	071
Precautionary Statements:	260, 280, 305+351+338, 301+330+331, 303+361+353, 308+311

Signal Word:	Danger
ADR/RID:	UN 2031 8 /C1 /II



N

Nitric acid solution 60%

Chemical formula:	HNO ₃
Relative molecular weight:	63
CAS:	7697-37-2
EINECS:	231-714-2

[pure \(32790\)](#)

Appearance	clear colourless liquid
Assay	59.0 - 63.0 %
Chloride (Cl ⁻)	max. 10 ppm
Fe (Iron)	max. 5 ppm

Hazard Statements: 290, 314, 331

EUH Statements: 071

Precautionary Statements: 260, 280, 305+351+338,
301+330+331, 303+361+353,
308+311

Signal Word: Danger

ADR/RID: UN 2031 8 /C1 /II



Nitrobenzene

Chemical formula:	C ₆ H ₅ NO ₂
Relative molecular weight:	123,11
CAS:	98-95-3
EINECS:	202-716-0

[A.G. \(22390\)](#)

Appearance	clear yellowish liquid
Assay	min. 99,0 %
Boiling point	210 - 211 °C
Acidity (as HNO ₃)	max. 0,005 %
Density (20 °C)	1,203 g/cm ³
Refractive index	1,552

Hazard Statements: 351, 360F, 331, 311, 301, 372, 412

EUH Statements:

Precautionary Statements: 201, 280, 301+310, 302+352,
304+341, 314

Signal Word: Danger

ADR/RID: UN 1662 6.1 /T1 /II



Nitromethane

Chemical formula:	CH ₃ NO ₂
Relative molecular weight:	61,04
CAS:	75-52-5
EINECS:	200-876-6

[pure \(22440\)](#)

Appearance	clear liquid
Assay	min. 95.0%
Density (20 °C)	1.136 g/cm ³
Refractive index	1.382
Flash point	36 °C

[ACS \(35360\)](#)

Appearance	clear liquid
Assay	min. 95.0%
Residue after evaporation	max. 0.002 %
Water	max. 0.05 %
Color scale (APHA)	max. 10
Density (20 °C)	1.136 g/cm ³
Refractive index	1.382
Flash point	36°C

Hazard Statements: 226, 302, 332, 351, 361fd

EUH Statements:

Precautionary Statements: 201, 210, 280, 301+312, 308+313,
370+378

Signal Word: Warning

ADR/RID: UN 1261 3 /F1 /II





1-Octanol

Chemical formula:	CH ₃ (CH ₂) ₇ OH
Relative molecular weight:	130,23
CAS:	111-87-5
EINECS:	203-917-6

A.G. (29020)

Appearance	clear colourless liquid
Assay	min. 99,0 %
Density (20 °C)	0,824 - 0,827 g/cm ³
Residue after evaporation	max. 0,004 %
Water	max. 0,1%
Free acids	max. 0,0002 meq/g

Hazard Statements:	319, 412
EUH Statements:	
Precautionary Statements:	280, 305+351+338
Signal Word:	Warning
ADR/RID:	



Oleic acid

Chemical formula:	CH ₃ (CH ₂) ₇ CH:CH(CH ₂) ₇ COOH
Relative molecular weight:	282,47
CAS:	112-80-1
EINECS:	204-007-1

pure (20050)

Appearance	clear yellowish liquid
Assay (jako C ₁₈ H ₃₄ O ₂)	min. 97,0 %
Oleic acid content	min. 65,0 %
Density (20 °C)	0,890 g/cm ³
Refractive index	1,460 - 1,463

Hazard Statements:	315
EUH Statements:	
Precautionary Statements:	280, 302+352
Signal Word:	Warning
ADR/RID:	



Oxalic acid dihydrate

Chemical formula:	HOOC-COOH · 2 H ₂ O
Relative molecular weight:	126,07
CAS:	6153-56-6
EINECS:	205-634-3

A.G. (20640)

Appearance	white crystals
Assay	min. 99,5 %
Sulphated ash	max. 0,01 %
Chloride (Cl ⁻)	max. 0,001 %
Sulfate (SO ₄ ²⁻)	max. 0,002 %
Fe (Iron)	max. 0,001 %
Pb (Lead)	max. 0,0005 %

pure (20630)

Appearance	white crystals
Assay	min. 98,5 %
99,5%+ (43420)	
Appearance	white crystals
Assay	min. 99,5 %
Sulphated ash	max. 0,01 %
Chloride (Cl ⁻)	max. 0,001 %
Sulfate (SO ₄ ²⁻)	max. 0,01 %
Fe (Iron)	max. 0,001 %
Pb (Lead)	max. 0,0005 %

Hazard Statements:	302, 312, 318
EUH Statements:	
Precautionary Statements:	280, 302+352, 305+351+338
Signal Word:	Danger
ADR/RID:	UN 3261 8 /C4 /III



P

Palmitic acid

Chemical formula:	CH ₃ (CH ₂) ₁₄ COOH
Relative molecular weight:	256,43
CAS:	57-10-3
EINECS:	200-312-9

[A.G. \(20070\)](#)

Appearance	white scales
Assay	min. 99,0 %
Melting point	62 - 63,5 °C

[pure \(20060\)](#)

Appearance	white scales
Assay	min. 97,0 %
Melting point	62 - 63,5 °C

Hazard Statements:	319
EUH Statements:	
Precautionary Statements:	305+351+338
Signal Word:	Warning
ADR/RID:	



Paraffin liquid

Chemical formula:	
Relative molecular weight:	
CAS:	8042-47-5
EINECS:	

[tested acc. to Ph. Eur.](#)

Appearance	clear, colorless oily liquid
Identification A, C	passes test
Titration acid or base	passes test
Density (20 °C)	0.810 - 0.875 g/cm ³
Dynamic viscosity	25 - 80 mPa.s
Polycyclic aromatic hydrocarbons	passes test
Readily carbonisable substances	passes test

[See below](#)

Appearance	clear, colorless oily liquid
Solid paraffins	passes test

Hazard Statements:	304
EUH Statements:	401, 210
Precautionary Statements:	260, 280, 301+310
Signal Word:	Danger
ADR/RID:	



Paraformaldehyde

Chemical formula:	(CH ₂ O)
Relative molecular weight:	
CAS:	30525-89-4
EINECS:	200-001-8

[pure \(23700\)](#)

Appearance	white powder
Assay	min. 95,0 %
Sulphated ash	max. 0,1 %
Heavy metals (as Pb)	max. 0,001 %

Hazard Statements:	228, 302, 315, 317, 318, 332, 335, 351
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EUH Statements:

Precautionary Statements: 210, 261, 280, 305+351+338

Signal Word: Danger

ADR/RID: UN 2213 4.1 /F1 /III



n-Pentane

Chemical formula:	CH ₃ (CH ₂) ₃ CH ₃
Relative molecular weight:	72,15
CAS:	109-66-0
EINECS:	203-692-4

A.G. (22520)

Appearance	clear colourless liquid
Assay	min. 99,0 %
Water	max. 0,01 %
Residue after evaporation	max. 0,05 %
Boiling point	35 - 37 °C
Density (20 °C)	0,626 g/cm ³
Refractive index	1,358
Flash point	-49 °C

pure (22510)

Appearance	clear colourless liquid
Assay	min. 95,0 %
Flash point	-49 °C

Hazard Statements:	225, 304, 336, 411
EUH Statements:	
Precautionary Statements:	210, 261, 273, 280, 301+310, 331
Signal Word:	Danger
ADR/RID:	UN 1265 3 /F1 /II



o-Phenanthroline hydrochloride monohydrate

Chemical formula:	C ₁₂ H ₈ N ₂ · HCl · H ₂ O
Relative molecular weight:	234,69
CAS:	18851-33-7
EINECS:	223-325-1

A.G. (22840)

Appearance	white or yellowish powder
Assay	min. 99,5 %
Sulphated ash	max. 0,2 %
Loss on drying (105°C)	max. 8,0 %
Sensitivity to Fe ²⁺	passes test

Hazard Statements:	301, 410
EUH Statements:	
Precautionary Statements:	273, 301+310
Signal Word:	Danger
ADR/RID:	UN 2811 6.1 /T2 /III



o-Phenanthroline monohydrate

Chemical formula:	C ₁₂ H ₈ N ₂ · H ₂ O
Relative molecular weight:	198,24
CAS:	5144-89-8
EINECS:	200-629-2

A.G. (22850)

Appearance	white crystalline substance
Assay	min. 99,0 %
Ash	max. 0,1 %
Melting point	93 - 95 °C

Hazard Statements:	301, 410
EUH Statements:	
Precautionary Statements:	301+310, 273
Signal Word:	Danger
ADR/RID:	UN 2811 6.1 /T2 /III



P

o-Phosphoric acid 75%

Chemical formula:	H ₃ PO ₄
Relative molecular weight:	98
CAS:	7664-38-2
EINECS:	231-633-2

[pure \(19180\)](#)

Appearance	clear colourless liquid
Assay	~ 75 %
Hazard Statements:	314, 290, 302
EUH Statements:	
Precautionary Statements:	280, 305+351+338, 310, 301+330+331, 303+361+353
Signal Word:	Danger
ADR/RID:	UN 1805 8 /C1 /III

**o-Phosphoric acid 85%**

Chemical formula:	H ₃ PO ₄
Relative molecular weight:	98
CAS:	7664-38-2
EINECS:	231-633-2

[A.G. \(19210\)](#)

Appearance	clear colourless liquid
Assay	84,0 - 87,0 %
Sulfate (SO ₄ ²⁻)	max. 0,01 %
Fe (Iron)	max. 0,002 %
Heavy metals (as Pb)	max. 0,002 %
Density (20 °C)	1,700 g/cm ³

[pure \(19200\)](#)

Appearance	clear colourless liquid
Assay	84,0 - 87,0 %
Density (20 °C)	1,700 g/cm ³
Hazard Statements:	314, 302, 290
EUH Statements:	
Precautionary Statements:	280, 305+351+338, 310, 301+330+331, 303+361+353, 310
Signal Word:	Danger
ADR/RID:	UN 1805 8 /C1 /III

**n-Propyl alcohol**

Chemical formula:	CH ₃ CH ₂ CH ₂ OH
Relative molecular weight:	60,1
CAS:	71-23-8
EINECS:	200-746-9

[A.G. \(22540\)](#)

Appearance	clear colourless liquid
Assay	min. 99,5 %
Water	max. 0,1 %
Residue after evaporation	max. 0,001 %
2-Propanol	max. 0,05 %
Boiling point	96 - 99 °C
Density (20 °C)	0,802 - 0,806 g/cm ³
Refractive index	1,385
Flash point	23 °C

[pure \(22530\)](#)

Appearance	clear colourless liquid
Assay	min. 99,0 %
Hazard Statements:	225, 318, 336
EUH Statements:	
Precautionary Statements:	210, 305+351+338, 233, 280
Signal Word:	Danger
ADR/RID:	UN 1274 3 /F1 /II



Peracetic acid 4%

Chemical formula:
Relative molecular weight:
CAS: 79-21-0
EINECS:

[See below \(20100\)](#)

Appearance	clear colourless liquid
Peracetic acid content	3,5 - 4,5 %
H ₂ O ₂	5,0 - 7,0 %
Hazard Statements:	H242 H302+H332 H314
EUH Statements:	
Precautionary Statements:	P280 P308+P313 P261 P305+-P351+P338
Signal Word:	Danger
ADR/RID:	UN 3149 5.1 /OC1 /II



Perchloric acid 64,5%

Chemical formula: HClO₄
Relative molecular weight: 100,46
CAS: 7601-90-3
EINECS: 231-512-4

[A.G. \(19300\)](#)

Appearance	clear colourless liquid
Assay	min. 64,5 %
Sulphated ash	max. 0,003 %
Free chlorine	max. 0,00005 %
Chloride (Cl ⁻)	max. 0,0003 %
Sulfate (SO ₄ ²⁻)	max. 0,001 %
Pb (Lead)	max. 0,0005 %
Fe (Iron)	max. 0,0005 %

[pure](#)

Appearance	clear colourless liquid
Assay	min. 64,5 %
Sulphated ash	max. 0,05 %
Hazard Statements:	271, 314, 290, 318, 302, 373
EUH Statements:	
Precautionary Statements:	260, 280, 305+351+338, 301+330+331, 304+340
Signal Word:	Danger
ADR/RID:	UN 1873 5.1 /OC1 /I



Perchloric acid 70-72%

Chemical formula: HClO₄
Relative molecular weight: 100,46
CAS: 7601-90-3
EINECS: 231-512-4

[A.G. \(19320\)](#)

Appearance	clear colourless liquid
Assay	min. 70,0 %
Sulphated ash	max. 0,003 %
Chloride (Cl ⁻)	max. 0,0003 %
Sulfate (SO ₄ ²⁻)	max. 0,001 %
Pb (Lead)	max. 0,0005 %
Fe (Iron)	max. 0,0005 %

Hazard Statements:	271, 314, 290, 318, 302, 373
EUH Statements:	
Precautionary Statements:	260, 280, 305+351+338, 301+330+331, 304+340
Signal Word:	Danger
ADR/RID:	UN 1873 5.1 /OC1 /I



P

Periodic acid

Chemical formula:	H ₅ IO ₆
Relative molecular weight:	227,94
CAS:	10450-60-9
EINECS:	233-937-0

A.G. (19700)

Appearance	white crystalline substance
Assay	min. 99,0 %
Br ⁻ , BrO ₃ ⁻ , Cl ⁻ , ClO ₃ ⁻ (as Cl ⁻)	max. 0,02 %
Sulfate (SO ₄ ²⁻)	max. 0,02 %
Fe (Iron)	max. 0,005 %
Heavy metals (as Pb)	max. 0,005 %

Hazard Statements:	271, 314, 372, 400
EUH Statements:	
Precautionary Statements:	220, 280, 310, 305+351+338
Signal Word:	Danger
ADR/RID:	UN 3085 5.1 /OC2 /II



Petroleum ether

Chemical formula:	
Relative molecular weight:	
CAS:	8032-32-4
EINECS:	265-151-9

A.G. (24120)

Appearance	klare farblose Flüssigkeit
Distillation range	40 - 65 °C
Residue after evaporation	max. 0,002 %
Aromatics (as Benzene)	max. 0,05 %
Water	max. 0,02 %
Density (20 °C)	0,650 g/cm ³
Refractive index	1,369
Flash point	-40 °C

Hazard Statements:	225, 304, 315, 336, 411, 350
EUH Statements:	
Precautionary Statements:	201, 243, 273, 280, 301+310, 331, 370+378, 403+235

Signal Word:	Danger
ADR/RID:	UN 1268 3 /F1 /II



Petroleum spirit

Chemical formula:	
Relative molecular weight:	
CAS:	
EINECS:	925-292-5

See below (34880)

Appearance	clear colourless flammable liquid
with a typical odor	
Identification	passes test
Density (20 °C)	0,666 - 0,690 g/cm ³
Distillation range	35 - 100 °C
Acids and bases	passes test
Lack of refining	passes test
Sulfur compounds, reducing substances	passes test
Benzene	max. 0,5 % obj.
Tetraethyllead	passes test
Foreign easily carbonisable substances	passes test
Residue after evaporation	max. 1 mg/100 ml

Hazard Statements:	225, 361f, 304, 373, 315, 336, 411
EUH Statements:	
Precautionary Statements:	210, 243, 273, 280, 308+311, 403+235
Signal Word:	Danger
ADR/RID:	UN 1208 3 /F1 /II



Phenol

Chemical formula:	C ₆ H ₅ OH
Relative molecular weight:	94,11
CAS:	108-95-2
EINECS:	203-632-7

A.G. (13780)

Appearance	colourless crystals
Assay	min. 99,5 %
Freezing point	39 - 41 °C
Residue after evaporation	max. 0,02 %
Fe (Iron)	max. 0,0005 %
Heavy metals (as Pb)	max. 0,0005 %

Hazard Statements: 341, 331, 311, 301, 373, 314

EUH Statements:

Precautionary Statements: 261, 280, 301+310, 303+361+353, 305+351+338

Signal Word: Danger

ADR/RID: UN 1671 6.1 / T2 / II



Phloroglucinol dihydrate

Chemical formula:	C ₆ H ₆ O ₃ · 2 H ₂ O
Relative molecular weight:	162,14
CAS:	6099-90-7
EINECS:	203-611-2

A.G. (13940)

Appearance	white powder
Assay	min. 99,0 %
Sulphated ash	max. 0,05 %
Melting point	219 - 222 °C

Phosphomolybdic acid hydrate

Chemical formula:	H ₃ [P(Mo ₃ O ₁₀) ₄] · aq
Relative molecular weight:	
CAS:	51429-74-8
EINECS:	234-713-5

A.G. (19140)

Appearance	yellow crystalline substance
Loss on drying (120°C)	max. 23,0 %
Chloride (Cl ⁻)	max. 0,005 %
Sulfate (SO ₄ ²⁻)	max. 0,01 %
Fe (Iron)	max. 0,002 %
Pb (Lead)	max. 0,002 %
Ni (Nickel)	max. 0,001 %
Cu (Copper)	max. 0,0005 %
Cr (Chromium)	max. 0,0005 %

pure (30300)

Appearance	yellow crystalline substance
Loss on drying (120°C)	max. 23,0 %
Chloride (Cl ⁻)	max. 0,005 %
Sulfate (SO ₄ ²⁻)	max. 0,01 %
Fe (Iron)	max. 0,005 %
Pb (Lead)	max. 0,005 %
Cu (Copper)	max. 0,001 %

Hazard Statements: 272, 314

EUH Statements:

Precautionary Statements: 220, 280, 301+330+331, 305+351+338

Signal Word: Danger

ADR/RID: UN 3084 8 / CO2 / II



P

Phosphorus pentachloride

Chemical formula:	PCl ₅
Relative molecular weight:	208,24
CAS:	10026-13-8
EINECS:	233-060-3

[pure \(16220\)](#)

Appearance	slightly yellowish powder
Assay	min. 98,0 %
Hazard Statements:	330, 302, 373, 314
EUH Statements:	014, 029
Precautionary Statements:	260, 280, 301+330+331, 304+340, 305+351+338, 310

Signal Word:	Danger
ADR/RID:	UN 1806 8 /C2 /II



Phosphorus pentaoxide

Chemical formula:	P ₂ O ₅
Relative molecular weight:	141,94
CAS:	1314-56-3
EINECS:	215-236-1

[A.G. \(23130\)](#)

Appearance	white powder
Assay	min. 99,0 %
Chloride (Cl ⁻)	max. 0,005 %
Fe (Iron)	max. 0,005 %
Heavy metals (as Pb)	max. 0,02 %

[pure \(23120\)](#)

Appearance	white powder
Assay	min. 98,0 %
Hazard Statements:	314
EUH Statements:	
Precautionary Statements:	260, 305+351+338, 310
Signal Word:	Danger
ADR/RID:	UN 1807 8 /C2 /II



Phosphorus(V) oxychloride

Chemical formula:	POCl ₃
Relative molecular weight:	153,33
CAS:	10025-87-3
EINECS:	233-046-7

[A.G. \(23520\)](#)

Appearance	clear slightly yellowish liquid
Assay	min. 99,0 %
Boiling point	105 - 110 °C
Density (20 °C)	1,675 g/cm ³
Refractive index	1,461

Hazard Statements:	330, 302, 372, 314
EUH Statements:	014, 029
Precautionary Statements:	260, 280, 301+330+331, 304+340, 305+351+338, 310

Signal Word:	Danger
ADR/RID:	UN 1810 6.1 /TC3 /I



Phosphotungstic acid hydrate

Chemical formula:	$\text{H}_3[\text{P}(\text{W}_3\text{O}_{10})_4] \cdot \text{aq}$
Relative molecular weight:	
CAS:	12501-23-4
EINECS:	235-087-6

A.G. (19230)

Appearance	white crystalline substance
Loss on drying	max. 15,0 %
Chloride (Cl^-)	max. 0,005 %
Sulfate (SO_4^{2-})	max. 0,01 %
Fe (Iron)	max. 0,002 %
Pb (Lead)	max. 0,002 %

Hazard Statements:	314
EUH Statements:	
Precautionary Statements:	280, 305+351+338, 310
Signal Word:	Danger
ADR/RID:	UN 3260 8 /C2 /III



Phthalic acid

Chemical formula:	$\text{C}_6\text{H}_4(\text{COOH})_2$
Relative molecular weight:	166,14
CAS:	88-99-3
EINECS:	201-873-2

A.G. (19250)

Appearance	white crystalline substance
Assay	min. 99,5 %
Sulphated ash	max. 0,02 %
Chloride (Cl^-)	max. 0,001 %
Sulfate (SO_4^{2-})	max. 0,005 %
Fe (Iron)	max. 0,001 %
Heavy metals (as Pb)	max. 0,0005 %

Hazard Statements:	319, 335, 315
EUH Statements:	
Precautionary Statements:	280, 305+351+338
Signal Word:	Warning
ADR/RID:	



Picric acid

Chemical formula:	$\text{C}_6\text{H}_3\text{N}_3\text{O}_7$
Relative molecular weight:	229,11
CAS:	88-89-1
EINECS:	201-865-9

A.G. (20120)

Appearance	yellow suspension layered with water
Stabilizer	$\text{H}_2\text{O} > 30 \%$
Assay (dried substance)	min. 99,0 %
Melting point (dry substance)	120 - 123 °C

Hazard Statements:	228, 311, 332, 302
EUH Statements:	001
Precautionary Statements:	210, 280, 312
Signal Word:	Danger
ADR/RID:	UN 1344 4.1 /D /I



P

Piperidine

Chemical formula:	C ₅ H ₁₁ N
Relative molecular weight:	85,15
CAS:	110-89-4
EINECS:	203-813-0

[See below \(47200\)](#)

Appearance	klare farblose Flüssigkeit
Assay	min 99,0 %
Density (20 °C)	0,861 - 0,863
Water	max. 0,5 %
Infrared spectrometry	passes test
Hazard Statements:	225, 302, 311 + 331, 314
EUH Statements:	
Precautionary Statements:	210, 240, 280, 301+330+331, 302+352, 304+340, 305+351+338, 308+311, 403+233
Signal Word:	Danger
ADR/RID:	UN 2401 8 /CF1 /I



Potassium acetate

Chemical formula:	CH ₃ COOK
Relative molecular weight:	98,14
CAS:	127-08-2
EINECS:	204-822-2

[A.G. \(22590\)](#)

Appearance	white powder
Assay (dried substance)	min. 99,0 %
Loss on drying (105°C)	max. 1,0 %
Insoluble matter in water	max. 0,005 %
pH (5% water solution, 20 °C)	7,0 - 9,0
Chloride (Cl ⁻)	max. 0,005 %
Sulfate (SO ₄ ²⁻)	max. 0,005 %
Fe (Iron)	max. 0,001 %
Heavy metals (as Pb)	max. 0,001 %

[pure \(22580\)](#)

Appearance	white powder
Assay	min. 98,0 %
Loss on drying (105°C)	max. 2 %
Insoluble matter in water	max. 0,01 %
pH (5% water solution, 20 °C)	7,0 - 9,0
Chloride (Cl ⁻)	max. 0,005 %
Sulfate (SO ₄ ²⁻)	max. 0,005 %
Fe (Iron)	max. 0,002 %
Heavy metals (as Pb)	max. 0,002 %

Potassium antimonyl tartrate trihydrate

Chemical formula:	C ₈ H ₄ K ₂ O ₁₂ Sb ₂ · 3H ₂ O
Relative molecular weight:	668,87
CAS:	28300-74-5
EINECS:	234-293-3

[A.G. \(28220\)](#)

Appearance	white crystalline substance
Assay	99,0 - 103,0 %
Chloride (Cl ⁻)	max. 0,01 %
Sulfate (SO ₄ ²⁻)	max. 0,05 %
Fe (Iron)	max. 0,005 %
Hazard Statements:	H301 H315 H317 H332 H411
EUH Statements:	
Precautionary Statements:	P261 P264 P273 P301+P310 P312
Signal Word:	Danger
ADR/RID:	UN 1551 6.1 /T5 /III



Potassium bromate

Chemical formula:	KBrO ₃
Relative molecular weight:	167,01
CAS:	7758-01-2
EINECS:	231-829-8

A.G. (11090)

Appearance	white crystalline substance
Assay	min. 99,0 %
pH (5% water solution, 20 °C)	5,0 - 9,0
Bromide (Br ⁻)	max. 0,05 %
Sulfate (SO ₄ ²⁻)	max. 0,01 %
Fe (Iron)	max. 0,005 %
Pb (Lead)	max. 0,005 %

pure (11080)

Appearance	white crystalline substance
Assay	min. 99,0 %

Hazard Statements:	271, 350, 301
EUH Statements:	
Precautionary Statements:	201, 210, 220, 308+311
Signal Word:	Danger
ADR/RID:	UN 1484 5.1 /O2 /II



Potassium bromide

Chemical formula:	KBr
Relative molecular weight:	119,01
CAS:	7758-02-3
EINECS:	231-830-3

A.G. (11150)

Appearance	white crystalline substance
Assay	min. 99,0 %
pH (5% water solution, 20 °C)	5,0 - 8,8
Chloride (Cl ⁻)	max. 0,2 %
Sulfate (SO ₄ ²⁻)	max. 0,005 %
Fe (Iron)	max. 0,005 %
Pb (Lead)	max. 0,005 %

pure (11140)

Appearance	white crystalline substance
Assay	min. 99,0 %

Hazard Statements:	315, 319, 335
EUH Statements:	
Precautionary Statements:	261, 280, 305+351+338
Signal Word:	Warning
ADR/RID:	



Potassium carbonate anhydrous

Chemical formula:	K ₂ CO ₃
Relative molecular weight:	138,21
CAS:	584-08-7
EINECS:	209-529-3

A.G. (27820)

Appearance	white granules
Assay	min. 99,0 %
Loss on ignition (600°C)	max. 1,0 %
Insoluble matter in water	max. 0,005 %
Chloride (Cl ⁻)	max. 0,005 %
Sulfate (SO ₄ ²⁻)	max. 0,004 %
Fe (Iron)	max. 0,001 %
Heavy metals (as Pb)	max. 0,001 %

pure (27810)

Appearance	white granules
Assay	min. 99,0 %

tested acc. to Ph. Eur. (38770)

Appearance	white granules
Assay	99,0 - 101,0 %
Chloride (Cl ⁻)	max. 0,0125 %
Sulfate (SO ₄ ²⁻)	max. 0,025 %
Ammonium (NH ₄ ⁺)	max. 0,001 %
As (Arsenic)	max. 0,0002 %
Ca (Calcium)	max. 0,01 %
Heavy metals (as Pb)	max. 0,005 %
Loss on drying (120°C)	max. 5,0 %

Hazard Statements:	302, 319, 335, 315
EUH Statements:	
Precautionary Statements:	302+352, 350+351+338
Signal Word:	Warning
ADR/RID:	



P

Potassium dihydrogenphosphate

Chemical formula:	KH ₂ PO ₄
Relative molecular weight:	136,09
CAS:	7778-77-0
EINECS:	231-913-4

A.G. (12300)

Appearance	white crystalline substance
Assay	min. 99,0 %
Chloride (Cl ⁻)	max. 0,005 %
Sulfate (SO ₄ ²⁻)	max. 0,02 %
Fe (Iron)	max. 0,005 %
Heavy metals (as Pb)	max. 0,005 %
pH (5% water solution)	4,0 - 5,0
Appearance of solution (10% in water)	clear, colourless

pure (12290)

Appearance	white crystalline substance
Assay	min. 98,0 %
Sulfate (SO ₄ ²⁻)	max. 0,02 %
Fe (Iron)	max. 0,02 %
Heavy metals (as Pb)	max. 0,02 %

Potassium dichromate

Chemical formula:	K ₂ Cr ₂ O ₇
Relative molecular weight:	294,19
CAS:	7778-50-9
EINECS:	231-906-6

A.G. (12510)

Appearance	orange crystalline substance
Assay	min. 99,5 %
Sulfate (SO ₄ ²⁻)	max. 0,01 %
Chloride (Cl ⁻)	max. 0,002 %
Insoluble matter in water	max. 0,003 %

pure (12500)

Appearance	orange crystalline substance
Assay	min. 99,0 %

99%+ (45360)

Appearance	orange crystalline substance
Assay	min. 99,5 %
Insoluble matter in water	max. 0,003 %

Hazard Statements: 272, 350, 340, 360FD, 330, 301, 372, 312, 314, 334, 335, 317, 410

EUH Statements:

Precautionary Statements: 201, 273, 280, 305+351+338, 308+313, 301+330+331

Signal Word: Danger

ADR/RID: UN 3086 6.1 /TO2 /I



Potassium disulfate

Chemical formula:	K ₂ S ₂ O ₇
Relative molecular weight:	254,33
CAS:	7790-62-7
EINECS:	232-216-8

A.G. (12680)

Assay	min. 98,0 %
Chloride (Cl ⁻)	max. 0,001 %
Fe (Iron)	max. 0,001 %
Heavy metals (as Pb)	max. 0,001 %
Appearance	white crystalline substance

Hazard Statements: 314

EUH Statements:

Precautionary Statements: 310, 280, 305+351+338

Signal Word: Danger

ADR/RID: UN 3260 8 /C2 /II



Potassium disulfite

Chemical formula:	K ₂ S ₂ O ₅
Relative molecular weight:	222,33
CAS:	16731-55-8
EINECS:	240-795-3

A.G. (12700)

Appearance	white crystalline substance
Assay	min. 97,0 %
Chloride (Cl ⁻)	max. 0,005 %
Fe (Iron)	max. 0,001 %
Heavy metals (as Pb)	max. 0,001 %

pure (12690)

Assay	min. 97,0 %
Appearance	white crystalline substance

Hazard Statements:	318
EUH Statements:	031
Precautionary Statements:	280, 305+351+338, 310
Signal Word:	Danger
ADR/RID:	



Potassium fluoride anhydrous

Chemical formula:	KF
Relative molecular weight:	58,1
CAS:	7789-23-3
EINECS:	232-151-5

A.G. (14030)

Appearance	white powder
Assay	min. 99,0 %
Chloride (Cl ⁻)	max. 0,005 %
Sulfate (SO ₄ ²⁻)	max. 0,1 %
Fe (Iron)	max. 0,005 %
Pb (Lead)	max. 0,005 %

pure

Assay	min. 99,0 %
Appearance	white powder
Chloride (Cl ⁻)	max. 0,01 %
Sulfate (SO ₄ ²⁻)	max. 0,1 %
Fe (Iron)	max. 0,005 %
Loss on ignition (500°C)	max. 0,5 %

Hazard Statements:	331, 311, 301
EUH Statements:	
Precautionary Statements:	261, 301+310, 302+352, 304+340
Signal Word:	Danger
ADR/RID:	UN 1812 6.1 / T5 / III



Potassium formate

Chemical formula:	HCOOK
Relative molecular weight:	84,12
CAS:	590-29-4
EINECS:	209-677-9

A.G. (21850)

Appearance	colourless crystals
Assay	min. 99,0 %
Chloride (Cl ⁻)	max. 0,001 %
Sulfate (SO ₄ ²⁻)	max. 0,002 %
Fe (Iron)	max. 0,0005 %
Heavy metals (as Pb)	max. 0,0005 %
pH (5% water solution, 25 °C)	7,0 - 8,5

pure (43850)

Appearance	colourless crystals
Assay	min. 96,0 %

P

Potassium hexacyanoferrate(II) trihydrate

Chemical formula:	$K_4Fe(CN)_6 \cdot 3 H_2O$
Relative molecular weight:	422,41
CAS:	14459-95-1
EINECS:	237-722-2

A.G. (13890)

Appearance	yellow crystalline substance
Assay	min. 99,5 %
Chloride (Cl ⁻)	max. 0,01 %
Sulfate (SO ₄ ²⁻)	max. 0,005 %
Pb (Lead)	max. 0,002 %

pure (13880)

Appearance	yellow crystalline substance
Assay	min. 99,0 %
Hazard Statements:	412
EUH Statements:	032
Precautionary Statements:	260, 273
Signal Word:	Danger
ADR/RID:	

Potassium hexacyanoferrate(III)

Chemical formula:	$K_3Fe(CN)_6$
Relative molecular weight:	329,26
CAS:	13746-66-2
EINECS:	237-323-3

A.G. (13860)

Appearance	red-orange crystalline substance
Assay	min. 99,0 %
Insoluble matter in water	max. 0,005 %
Chloride (Cl ⁻)	max. 0,02 %
Sulfate (SO ₄ ²⁻)	max. 0,01 %
Hexacyanoferrate(II) [Fe(CN) ₆] ⁴⁻	max. 0,05 %

99%+ (40510)

Appearance	red-orange crystalline substance
Assay	min. 99,0 %
Chloride (Cl ⁻)	max. 0,02 %
Sulfate (SO ₄ ²⁻)	max. 0,01 %
Hexacyanoferrate(II) [Fe(CN) ₆] ⁴⁻	max. 0,05 %

pure (13850)

Appearance	red-orange crystalline substance
Assay	min. 98,0 %
Hazard Statements:	
EUH Statements:	032
Precautionary Statements:	260
Signal Word:	Danger
ADR/RID:	

Potassium hexahydroxoantimonate(V)

Chemical formula:	$KSb(OH)_6$
Relative molecular weight:	262,9
CAS:	12208-13-8
EINECS:	235-387-7

A.G. (14740)

Appearance	white powder
Assay (as KSbO ₃)	min. 99,0 %
Loss on ignition (600°C)	max. 22 %
Hazard Statements:	302, 332, 411
EUH Statements:	
Precautionary Statements:	273
Signal Word:	Warning
ADR/RID:	UN 1549 6.1 /T5 /III



Potassium hydrogen tartrate

Chemical formula:	C ₄ H ₆ KO ₆
Relative molecular weight:	188,18
CAS:	868-14-4
EINECS:	212-769-1

A.G.

Appearance	white crystalline substance
Assay	min. 99,0 %
Chloride (Cl ⁻)	max. 0,002 %
Sulfate (SO ₄ ²⁻)	max. 0,005 %
Fe (Iron)	max. 0,002 %
Ammonium (NH ₄ ⁺)	max. 0,005 %
Insoluble matter in dilute HCl	max. 0,005 %

Potassium hydrogencarbonate

Chemical formula:	KHCO ₃
Relative molecular weight:	100,13
CAS:	298-14-6
EINECS:	206-059-0

A.G. (15300)

Appearance	white crystalline substance
Assay	min. 99,0 %
Chloride (Cl ⁻)	max. 0,005 %
Sulfate (SO ₄ ²⁻)	max. 0,005 %
Fe (Iron)	max. 0,005 %
Heavy metals (as Pb)	max. 0,005 %

pure (15290)

Appearance	white crystalline substance
Assay	min. 99,0 %
Chloride (Cl ⁻)	max. 0,1 %
Sulfate (SO ₄ ²⁻)	max. 0,1 %

Potassium hydrogenphthalate

Chemical formula:	C ₈ H ₅ KO ₄
Relative molecular weight:	204,22
CAS:	877-24-7
EINECS:	212-889-4

A.G. (15180)

Appearance	white crystalline substance
Assay	min. 99,5 %
Chloride (Cl ⁻)	max. 0,002 %
Sulfate (SO ₄ ²⁻)	max. 0,005 %
Fe (Iron)	max. 0,0005 %
Heavy metals (as Pb)	max. 0,001 %

pure (15170)

Appearance	white crystalline substance
Assay	min. 99,0 %
Chloride (Cl ⁻)	max. 0,002 %
Sulfate (SO ₄ ²⁻)	max. 0,005 %

P

Potassium hydrogensulfate

Chemical formula:	KHSO ₄
Relative molecular weight:	136,17
CAS:	7646-93-7
EINECS:	231-594-1

A.G. (15200)

Appearance	white crystalline substance
Assay	min. 99,0 %
Chloride (Cl ⁻)	max. 0,0005 %
Fe (Iron)	max. 0,0005 %
Heavy metals (as Pb)	max. 0,0005 %

pure (15190)

Appearance	white crystalline substance
Assay	min. 99,0 %

Hazard Statements:	314, 335
EUH Statements:	
Precautionary Statements:	261, 280, 305+351+338, 310
Signal Word:	Danger
ADR/RID:	UN 2509 8 /C2 /II



Potassium hydroxide flakes

Chemical formula:	KOH
Relative molecular weight:	56,11
CAS:	1310-58-3
EINECS:	215-181-3

A.G. (15540)

Appearance	white scales
Assay	min. 85,0 %
K ₂ CO ₃	max. 1 %
Chloride (Cl ⁻)	max. 0,007 %
Sulfate (SO ₄ ²⁻)	max. 0,002 %
Fe (Iron)	max. 0,0005 %
Heavy metals (as Ag)	max. 0,0005 %
Total nitrogen (as N)	max. 0,0005 %

pure (15530)

Appearance	white scales
Assay	min. 84,5 %
K ₂ CO ₃	max. 1,5 %
Fe (Iron)	max. 0,001 %
Heavy metals (as Ag)	max. 0,001 %
Total nitrogen (as N)	max. 0,001 %

Hazard Statements:	290, 302, 314
EUH Statements:	
Precautionary Statements:	280, 310, 305+351+338
Signal Word:	Danger
ADR/RID:	UN 1813 8 /C6 /II



Potassium hydroxide pellets

Chemical formula:	KOH
Relative molecular weight:	56,11
CAS:	1310-58-3
EINECS:	215-181-3

A.G. (15520)

Appearance	white pips
Assay	min. 85,0 %
K ₂ CO ₃	max. 1 %
Chloride (Cl ⁻)	max. 0,007 %
Sulfate (SO ₄ ²⁻)	max. 0,002 %
Fe (Iron)	max. 0,0005 %
Heavy metals (as Ag)	max. 0,0005 %
Total nitrogen (as N)	max. 0,0005 %

pure (15510)

Appearance	white pips
Assay	min. 84,5 %
K ₂ CO ₃	max. 1,5 %
Fe (Iron)	max. 0,001 %
Heavy metals (as Ag)	max. 0,001 %
Total nitrogen (as N)	max. 0,001 %

Hazard Statements:	290, 302, 314
EUH Statements:	
Precautionary Statements:	280, 310, 305+351+338
Signal Word:	Danger
ADR/RID:	UN 1813 8 /C6 /II



Potassium chlorate

Chemical formula:	KClO ₃
Relative molecular weight:	122,55
CAS:	3811-04-9
EINECS:	223-289-7

A.G. (16010)

Appearance	white crystalline substance
Assay	min. 99,0 %
Chloride (Cl ⁻)	max. 0,005 %
Sulfate (SO ₄ ²⁻)	max. 0,005 %
Fe (Iron)	max. 0,005 %
Heavy metals (as Pb)	max. 0,005 %

pure (16000)

Appearance	white crystalline substance
Assay	min. 98,0 %

Hazard Statements:	271, 302, 332, 411
EUH Statements:	
Precautionary Statements:	210, 220, 273
Signal Word:	Danger
ADR/RID:	UN 1485 5.1 /O2 /II



Potassium chloride

Chemical formula:	KCl
Relative molecular weight:	74,56
CAS:	7447-40-7
EINECS:	231-211-8

A.G. (16210)

Appearance	white crystalline substance
Assay	min. 99,5 %
Sulfate (SO ₄ ²⁻)	max. 0,003 %
Fe (Iron)	max. 0,0002 %
Heavy metals (as Pb)	max. 0,0005 %
Na (Sodium)	max. 0,02 %
Total nitrogen (as N)	max. 0,001 %
Loss on drying (130°C)	max. 0,2 %
pH (5% water solution)	5,0 - 8,0

pure (16200)

Appearance	white crystalline substance
Assay	min. 99,0 %
Loss on drying (130°C)	max. 0,5 %
Insoluble matter in water	max. 0,05 %

Potassium chromate

Chemical formula:	K ₂ CrO ₄
Relative molecular weight:	194,2
CAS:	7789-00-6
EINECS:	232-140-5

A.G. (17230)

Appearance	yellow crystalline substance
Assay	min. 99,0 %
pH (5% water solution)	8,5 - 10,0
Insoluble matter in water	max. 0,005 %
Chloride (Cl ⁻)	max. 0,005 %
Sulfate (SO ₄ ²⁻)	max. 0,005 %
Fe (Iron)	max. 0,005 %
Pb (Lead)	max. 0,005 %

pure (17220)

Appearance	yellow crystalline substance
Assay	min. 98,0 %

ACS (40940)

Appearance	yellow crystalline substance
Assay	min. 99,0 %
pH (5% water solution)	8,6 - 9,8
Insoluble matter in water	max. 0,005 %
Chloride (Cl ⁻)	max. 0,005 %
Sulfate (SO ₄ ²⁻)	max. 0,03 %
Ca (Calcium)	max. 0,005 %
Na (Sodium)	max. 0,02 %

Hazard Statements:	350i, 340, 319, 335, 315, 317, 410
EUH Statements:	
Precautionary Statements:	201, 273, 280, 305+351+338, 308+313, 302+352
Signal Word:	Danger
ADR/RID:	UN 3288 6.1 /T5 /II



P

Potassium iodate

Chemical formula:	KIO ₃
Relative molecular weight:	214
CAS:	7758-05-6
EINECS:	231-831-9

A.G. (17610)

Appearance	white powder
Assay	min. 99,0 %
Loss on drying (110°C)	max. 0,05 %
I (Iodine)	max. 0,001 %
Sulfate (SO ₄ ²⁻)	max. 0,005 %
Cl ⁻ , ClO ₃ ⁻ , Br ⁻ , BrO ₃ ⁻ (as Cl ⁻)	max. 0,01 %
Total nitrogen (as N)	max. 0,005 %
pH (5% water solution)	5,0 - 8,0

pure (30820)

Appearance	white powder
Assay	min. 99,0 %

ACS (30460)

Appearance	white powder
Assay	min. 99,4 - 100,4 %
pH (5% water solution)	5,0 - 8,0
Insoluble matter	max. 0,005 %
Cl ⁻ , Br ⁻ (as Cl ⁻)	max. 0,01 %
Iodide (I ⁻)	max. 0,001 %
Total nitrogen (as N)	max. 0,005 %
Sulfate (SO ₄ ²⁻)	max. 0,005 %
Heavy metals (as Pb)	5 ppm
Fe (Iron)	max. 0,001 %
Na (Sodium)	max. 0,005 %

Hazard Statements:	272, 319, 335, 315
EUH Statements:	
Precautionary Statements:	305+351+338
Signal Word:	Danger
ADR/RID:	UN 1479 5.1 /O2 /II



Potassium iodide

Chemical formula:	KI
Relative molecular weight:	166,01
CAS:	7681-11-0
EINECS:	231-659-4

A.G. (17670)

Appearance	white crystalline substance
Assay (dried substance)	min. 99,5 %
Loss on drying (105°C)	max. 0,2 %
Insoluble matter in water	max. 0,005 %
Cl ⁻ , Br ⁻ (as Cl ⁻)	max. 0,01 %
Sulfate (SO ₄ ²⁻)	max. 0,005 %
pH (5% water solution)	6,0 - 9,2

pure (17650)

Appearance	white crystalline substance
Assay (dried substance)	min. 99,0 %
Loss on drying (105°C)	max. 0,5 %
Insoluble matter in water	max. 0,01 %
Cl ⁻ , Br ⁻ (as Cl ⁻)	max. 0,02 %
Sulfate (SO ₄ ²⁻)	max. 0,02 %

ACS (17640)

Appearance	white crystalline substance
Assay	min. 99,0 %
pH (5% water solution)	6,0 - 9,2
Insoluble matter in water	max. 0,005 %
Loss on drying (150°C)	max. 0,2 %
Cl ⁻ , Br ⁻ (as Cl ⁻)	max. 0,01 %
Iodate (IO ₃ ⁻)	3 ppm
Phosphate (PO ₄ ³⁻)	max. 0,001 %
Sulfate (SO ₄ ²⁻)	max. 0,005 %
Ba (Barium)	max. 0,002 %
Heavy metals (as Pb)	5 ppm
Fe (Iron)	3 ppm
Ca (Calcium)	max. 0,002 %
Mg (Magnesium)	max. 0,001 %
Na (Sodium)	max. 0,005 %

Hazard Statements:	372
EUH Statements:	
Precautionary Statements:	260, 264, 270, 314
Signal Word:	Danger
ADR/RID:	



Potassium nitrate

Chemical formula:	KNO ₃
Relative molecular weight:	101,11
CAS:	7757-79-1
EINECS:	231-818-8

A.G. (12980)

Appearance	white crystalline substance
Assay	min. 99,0 %
Chloride (Cl ⁻)	max. 0,002 %
Sulfate (SO ₄ ²⁻)	max. 0,001 %
Fe (Iron)	max. 0,001 %
Heavy metals (as Pb)	max. 0,001 %
Insoluble matter in water	max. 0,005 %

pure (12970)

Appearance	white crystalline substance
Assay	min. 98,0 %

Hazard Statements:	272
EUH Statements:	
Precautionary Statements:	220
Signal Word:	Warning
ADR/RID:	UN 1486 5.1 /O2 /III



Potassium nitrite

Chemical formula:	KNO ₂
Relative molecular weight:	85,11
CAS:	7758-09-0
EINECS:	231-832-4

A.G. (13390)

Appearance	light yellow crystalline substance
Assay	min. 98,0 %
pH (5% water solution, 20 °C)	7,0 - 10,0
Sulfate (SO ₄ ²⁻)	max. 0,005 %
Chloride (Cl ⁻)	max. 0,005 %
Fe (Iron)	max. 0,0005 %
Heavy metals (as Pb)	max. 0,0005 %

pure (31480)

Appearance	light yellow crystalline substance
Assay	min. 97,0 %
Hazard Statements:	272, 301, 400
EUH Statements:	
Precautionary Statements:	220, 301+310, 273
Signal Word:	Danger
ADR/RID:	UN 1488 5.1 /O2 /II



Potassium oxalate monohydrate

Chemical formula:	C ₂ K ₂ O ₄ · H ₂ O
Relative molecular weight:	184,24
CAS:	6487-48-5
EINECS:	209-506-8

A.G. (26760)

Appearance	white crystalline substance
Assay	min. 99,0 %
pH (5% water solution)	7,0 - 8,5
Chloride (Cl ⁻)	max. 0,005 %
Sulfate (SO ₄ ²⁻)	max. 0,02 %
Fe (Iron)	max. 0,005 %
Heavy metals (as Pb)	max. 0,005 %

pure (30420)

Appearance	white crystalline substance
Assay	min. 99,0 %
Hazard Statements:	302, 312
EUH Statements:	
Precautionary Statements:	280, 302+352
Signal Word:	Warning
ADR/RID:	



Potassium perchlorate

Chemical formula:	KClO ₄
Relative molecular weight:	138,5
CAS:	7778-74-7
EINECS:	231-912-9

A.G. (16970)

Appearance	white powder
Assay	min. 99,0 %
Sulfate (SO ₄ ²⁻)	max. 0,005 %
Fe (Iron)	max. 0,005 %
Heavy metals (as Pb)	max. 0,005 %

pure (16960)

Appearance	white powder
Assay	min. 98,5 %
Hazard Statements:	271, 302
EUH Statements:	
Precautionary Statements:	220
Signal Word:	Danger
ADR/RID:	UN 1489 5.1 /O2 /II



P

Potassium periodate

Chemical formula:	KIO ₄
Relative molecular weight:	230
CAS:	7790-21-8
EINECS:	232-196-0

A.G. (17730)

Appearance	white crystalline substance
Assay (dried substance)	min. 99,0 %
Insoluble matter in water	max. 0,01 %
Loss on drying (105°C)	max. 0,1 %
Cl ⁻ , ClO ₃ ⁻ (as Cl ⁻)	max. 0,02 %
Sulfate (SO ₄ ²⁻)	max. 0,005 %
Fe (Iron)	max. 0,005 %
Heavy metals (as Pb)	max. 0,005 %

pure (30840)

Appearance	white crystalline substance
Assay	min. 99,0 %
Hazard Statements:	272, 319, 335, 315
EUH Statements:	
Precautionary Statements:	220, 305+351+338, 280
Signal Word:	Danger
ADR/RID:	UN 1479 5.1 /O2 /II



Potassium permanganate

Chemical formula:	KMnO ₄
Relative molecular weight:	158,04
CAS:	7722-64-7
EINECS:	231-760-3

A.G. (21040)

Appearance	dark purple crystals
Assay	min. 99,0 %
Insoluble matter in water	max. 0,2 %
Chloride (Cl ⁻)	max. 0,005 %
Sulfate (SO ₄ ²⁻)	max. 0,007 %

pure (21030)

Appearance	dark purple crystals
Assay	min. 98,5 %
Insoluble matter in water	max. 1,0 %
Hazard Statements:	272, 302, 361d, 314, 410
EUH Statements:	
Precautionary Statements:	273, 220, 270, 303+361+ 353, 305+351+338
Signal Word:	Danger
ADR/RID:	UN 1490 5.1 /O2 /II



Potassium peroxodisulfate

Chemical formula:	K ₂ S ₂ O ₈
Relative molecular weight:	270,33
CAS:	7727-21-1
EINECS:	231-781-8

A.G. (24060)

Appearance	white crystalline substance
Assay	min. 99,0 %
Chloride (Cl ⁻)	max. 0,001 %
Fe (Iron)	max. 0,001 %
Heavy metals (as Pb)	max. 0,001 %

pure (24050)

Appearance	white crystalline substance
Assay	min. 98,0 %
Hazard Statements:	272, 302, 319, 335, 315, 334, 317
EUH Statements:	
Precautionary Statements:	261, 280, 305+351+338, 337+313, 342+311
Signal Word:	Danger
ADR/RID:	UN 1492 5.1 /O2 /III



Potassium sodium carbonate

Chemical formula:
Relative molecular weight:
CAS: 10424-09-6
EINECS:

[pure \(27790\)](#)

Appearance white powder
Assay (Na) 16,0 - 21,0 %
Assay (K) 30,0 - 36,0 %
Loss on ignition (600°C) max. 1,0 %

Hazard Statements: 315, 319, 335
EUH Statements:
Precautionary Statements: 261, 305+351+338
Signal Word: Warning
ADR/RID:



Potassium sodium tartrate tetrahydrate

Chemical formula: $C_4H_4KNaO_6 \cdot 4H_2O$
Relative molecular weight: 282,23
CAS: 6381-59-5
EINECS: 206-156-8

[A.G. \(28250\)](#)

Appearance white crystalline substance
Assay min. 99,0 %
Insoluble matter in water max. 0,005 %
Chloride (Cl⁻) max. 0,001 %
Sulfate (SO₄²⁻) max. 0,005 %
Fe (Iron) max. 0,0005 %
Heavy metals (as Pb) max. 0,0005 %
pH (5% water solution) 7,0 - 8,5

[pure \(28240\)](#)

Appearance white crystalline substance
Assay min. 99,0 %
Insoluble matter in water max. 0,01 %
Chloride (Cl⁻) max. 0,002 %
Sulfate (SO₄²⁻) max. 0,02 %
pH (5% water solution) 6,0 - 8,5

Hazard Statements:
EUH Statements:
Precautionary Statements: 260, 262
Signal Word: Warning
ADR/RID:

Potassium sorbate

Chemical formula: $C_6H_7KO_2$
Relative molecular weight: 150,22
CAS: 24634-61-5
EINECS: 246-376-1

[pure \(26230\)](#)

Appearance white granules
Assay min. 99,0 %
Fe (Iron) max. 0,005 %
Heavy metals (as Pb) max. 0,005 %

Hazard Statements: 319, 315
EUH Statements:
Precautionary Statements: 261, 305+351+338
Signal Word: Warning
ADR/RID:



P

Potassium sulfate

Chemical formula:	K ₂ SO ₄
Relative molecular weight:	174,27
CAS:	7778-80-5
EINECS:	231-915-5

[A.G. \(25340\)](#)

Appearance	white crystalline substance
Assay	min. 99,0 %
pH (5% water solution)	5,2 - 8,5
Chloride (Cl ⁻)	max. 0,0005 %
Heavy metals (as Pb)	max. 0,001 %

[pure \(25330\)](#)

Appearance	white crystalline substance
Assay	min. 99,0 %

Potassium sulfide

Chemical formula:	K ₂ Sx
Relative molecular weight:	
CAS:	37199-66-9
EINECS:	253-390-1

[A.G. \(30410\)](#)

Assay (as K ₂ S)	42,0 - 44,0 %
Appearance	brownish yellow pieces

[pure \(26640\)](#)

Assay (as K ₂ S)	min. 42,0 %
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Hazard Statements:	314, 400
EUH Statements:	031
Precautionary Statements:	273, 280, 305+351+338, 310
Signal Word:	Danger
ADR/RID:	UN 1847 8 /C6 /II



Potassium thiocyanate

Chemical formula:	KSCN
Relative molecular weight:	97,08
CAS:	333-20-0
EINECS:	206-370-1

[A.G. \(27270\)](#)

Appearance	white crystalline substance
Assay	min 99,0 %
Chloride (Cl ⁻)	max. 0,005 %
Sulfate (SO ₄ ²⁻)	max. 0,005 %
Fe (Iron)	max. 0,0001 %
Heavy metals (as Pb)	max. 0,0005 %

[pure \(27260\)](#)

Appearance	white crystalline substance
Assay	min 97,5 %

Hazard Statements:	302, 312, 332, 412, 318
EUH Statements:	032
Precautionary Statements:	273, 280, 310
Signal Word:	Danger
ADR/RID:	



Propionic acid

Chemical formula:	CH ₃ CH ₂ COOH
Relative molecular weight:	74,08
CAS:	79-09-4
EINECS:	201-176-3

[pure \(20130\)](#)

Appearance	colourless to slightly yellowish
liquid	
Assay	min. 99,0 %
Boiling point	140 - 142 °C
Density (20 °C)	0,992 g/cm ³
Refractive index	1,387
Flash point	54 °C

Hazard Statements:	314, 226, 335
EUH Statements:	
Precautionary Statements:	210, 280, 301+330+331, 305+351+338, 310
Signal Word:	Danger
ADR/RID:	UN 3463 8 /CF1 /II



Propylene carbonate

Chemical formula:	C ₄ H ₆ O ₃
Relative molecular weight:	102,09
CAS:	108-32-7
EINECS:	203-572-1

[See below](#)

Appearance	clear liquid
Assay (GC)	min. 99.0%
Density (25 °C)	1,204 - 1,206 g/cm ³
Identification B (IR spectrum)	passes test

Hazard Statements:	319
EUH Statements:	
Precautionary Statements:	280, 305+351+338
Signal Word:	Danger
ADR/RID:	



Propylene glycol

Chemical formula:	CH ₃ CH(OH)CH ₂ OH
Relative molecular weight:	76,1
CAS:	57-55-6
EINECS:	200-338-0

[A.G. \(24300\)](#)

Appearance	clear colourless liquid
Assay	min. 99,5 %
Water	max. 0,2 %
Sulphated ash	max. 0,01 %
Boiling point	184 - 189 °C
Density (20 °C)	1,035 - 1,040 g/cm ³
Refractive index	1,431 - 1,433

[pure \(24290\)](#)

Appearance	clear colourless liquid
Assay	min. 99,0 %

P

Pyridine

Chemical formula:	C ₅ H ₅ N
Relative molecular weight:	79,1
CAS:	110-86-1
EINECS:	203-809-9

[A.G. \(24620\)](#)

Appearance	colourless to yellowish liquid
Assay	min. 99,5 %
Water	max. 0,1 %
Residue after evaporation	max. 0,002 %
Substances reducing KMnO ₄	max. 0,0005 %
Boiling point	115 - 116 °C (lit.)
Density (20 °C)	0,983 g/cm ³
Refractive index	1,510
Flash point	17 °C (lit.)

[pure \(24610\)](#)

Appearance	colourless to yellowish liquid
Assay	min. 99,0 %
Boiling point	114 - 116 °C (lit.)

[ACS \(43880\)](#)

Appearance	colourless to yellowish liquid
Assay	min. 99,0 %
Water	max. 0,1 %
Residue after evaporation	max. 0,002 %
Solubility	passes test
Substances reducing KMnO ₄	passes test
Chloride (Cl ⁻)	max. 10 ppm
Sulfate (SO ₄ ²⁻)	max. 10 ppm
Ammonium (NH ₄ ⁺)	max. 20 ppm
Cu (Copper)	max. 5 ppm
Density (20 °C)	0,983 g/cm ³
Refractive index	1,510

Hazard Statements:	225, 332, 312, 302
EUH Statements:	
Precautionary Statements:	210
Signal Word:	Danger
ADR/RID:	UN 1282 3 /F1 /II



4-Pyridinecarboxylic acid

Chemical formula:	C ₆ H ₅ NO ₂
Relative molecular weight:	231,11
CAS:	55-22-1
EINECS:	

[See below](#)

Appearance	White to cream powder
Assay (GC)	min. 98,0%
Identification B (IR spectrum)	passes test

Hazard Statements:	319
EUH Statements:	
Precautionary Statements:	260, 262, 305+351+338
Signal Word:	Warning
ADR/RID:	



Pyrocatechol

Chemical formula:	C ₆ H ₆ O ₂
Relative molecular weight:	110,11
CAS:	120-80-9
EINECS:	204-427-5

[pure \(24710\)](#)

Appearance	light brown substance
Assay	min. 98,0 %
Melting point	101 - 104 °C

Hazard Statements:	301, 311, 319, 315, 350, 341
EUH Statements:	
Precautionary Statements:	280, 305+351+338, 302+352, 308+313

Signal Word:	Danger
ADR/RID:	UN 2811 6.1 /T2 /III



Pyrogallol

Chemical formula:	C ₆ H ₃ (OH) ₃
Relative molecular weight:	126,11
CAS:	87-66-1
EINECS:	201-762-9

[A.G. \(24690\)](#)

Appearance	off-white substance
Assay	min. 99,0 %
Ash	max. 0,05 %
Melting point	132 - 134 °C

[pure \(24680\)](#)

Appearance	off-white substance
Assay	min. 98,0 %
Ash	max. 0,05 %
Melting point	132 - 134 °C

Hazard Statements: 341, 332, 302, 312, 412

EUH Statements:

Precautionary Statements: 273, 280

Signal Word: Warning

ADR/RID: UN 2811 6.1 /T2 /III



R

Ramsay grease

Chemical formula:
Relative molecular weight:
CAS:
EINECS:

[See below \(24730\)](#)

Appearance	yellow-brown paste
Functional test	passes test

Resorcinol

Chemical formula:	C ₆ H ₆ O ₂
Relative molecular weight:	110,11
CAS:	108-46-3
EINECS:	203-585-2

[A.G. \(24790\)](#)

Appearance	white, pink or yellow scales
Assay (dried substance)	min. 99,5 %
Melting point	109 - 112 °C
Loss on drying	max. 0,5 %

[pure \(24780\)](#)

Appearance	white, pink or yellow scales
Assay (dried substance)	min. 98,0 %
Melting point	109 - 112 °C

Hazard Statements:	302, 315, 317, 318, 370, 400, 412
EUH Statements:	
Precautionary Statements:	260, 273, 280, 302+352, 305+351+338, 308+311
Signal Word:	Danger
ADR/RID:	UN 2876 6.1 /T2 /III



Salicylaldehyde

Chemical formula:	HOC ₆ H ₄ CHO
Relative molecular weight:	122,12
CAS:	90-02-8
EINECS:	201-961-0

A.G. (24990)

Appearance	yellowish liquid
Assay	min. 99,0 %
Melting point	1 - 2 °C
Water	max. 0,2 %
Density (20 °C)	1,168 g/cm ³
Refractive index	1,573

Hazard Statements: 302, 315, 317, 319, 335, 411

EUH Statements:

Precautionary Statements: 280, 301+312+330, 305+351+338

Signal Word: Warning

ADR/RID:



Salicylic acid

Chemical formula:	HOC ₆ H ₄ COOH
Relative molecular weight:	138,12
CAS:	69-72-7
EINECS:	200-712-3

A.G. (20160)

Appearance	white crystals
Assay	min. 99,0 %
Sulphated ash	max. 0,1 %
Melting point	158 - 161 °C
Chloride (Cl ⁻)	max. 0,005 %
Sulfate (SO ₄ ²⁻)	max. 0,02 %
Heavy metals (as Pb)	max. 0,001 %

Hazard Statements: 302, 318, 361d

EUH Statements:

Precautionary Statements: 201, 280, 305+351+338-308+311

Signal Word: Danger

ADR/RID:



Sea sand purified

Chemical formula:	
Relative molecular weight:	
CAS:	
EINECS:	

A.G.

Appearance	clear slightly yellowish liquid
Particle size (0,1 - 0,5 mm)	min. 90 %
Grain size fraction > 0,100 mm	2 - 15 %
Grain size fraction > 0,200 mm	35 - 55 %
Grain size fraction > 0,315 mm	15 - 35 %
Grain size fraction > 0,400 mm	5 - 20 %
Grain size fraction > 0,500 mm	1 - 4 %
Grain size fraction > 0,630 mm	0 - 0,5 %

S

Selenous acid

Chemical formula:	H ₂ SeO ₃
Relative molecular weight:	128,97
CAS:	7783-00-8
EINECS:	231-974-7

[pure \(20170\)](#)

Appearance	white crystals
Assay	min. 97,0 %
Hazard Statements:	301, 331, 373, 410
EUH Statements:	
Precautionary Statements:	261, 273, 301+310, 311
Signal Word:	Danger
ADR/RID:	UN 3283 6.1 /T5 /II



Silica anhydrous

Chemical formula:	SiO ₂
Relative molecular weight:	60,09
CAS:	112945-52-5
EINECS:	

[A.G. \(23270\)](#)

Appearance	white powder
Loss on ignition (1000°C)	max. 2,0 %
Fe (Iron)	max. 0,05 %

Silica gel for desiccators

Chemical formula:	SiO ₂
Relative molecular weight:	60,08
CAS:	
EINECS:	

[See below \(25140\)](#)

Appearance	formed beads
Particle size	3,4 - 8 mm
Water content during packaging	~ 2 %

Silica gel for desiccators blue

Chemical formula: SiO_2
Relative molecular weight: 60,08
CAS:
EINECS:

[See below \(32480\)](#)

Appearance	formed beads
Particle size	3 - 8 mm
Water content during packaging	~ 1 %
Sensitivity	blue - pink

Silica gel for desiccators orange

Chemical formula: SiO_2
Relative molecular weight: 60,08
CAS:
EINECS:

[See below \(32490\)](#)

Appearance	orange matter
Particle size	2 - 5 mm
Water	~ 1 %
Sensitivity	orange - green

Silver chloride

Chemical formula: AgCl
Relative molecular weight: 143,32
CAS: 7783-90-6
EINECS: 232-033-3

[A.G. \(16640\)](#)

Appearance	white powder
Assay	min. 99,0 %
Water	max. 0,2 %

Hazard Statements: 335
EUH Statements:
Precautionary Statements: 261, 304+340
Signal Word: Warning
ADR/RID:



S

Silver nitrate

Chemical formula:	AgNO ₃
Relative molecular weight:	169,88
CAS:	7761-88-8
EINECS:	231-853-9

A.G. (13300)

Appearance	white crystalline substance
Assay	min. 99,8 %
Substance not precipitated by HCl	max. 0,1 %
Sulfate (SO ₄ ²⁻)	max. 0,01 %
Chloride (Cl ⁻)	max. 0,001 %
Fe (Iron)	max. 0,0005 %
Hazard Statements:	272, 290, 314, 410
EUH Statements:	
Precautionary Statements:	220, 273, 280, 305+351+338, 310, 301+330+331
Signal Word:	Danger
ADR/RID:	UN 1493 5.1 /O2 /II



Silver sulfate

Chemical formula:	Ag ₂ SO ₄
Relative molecular weight:	311,8
CAS:	10294-26-5
EINECS:	233-653-7

A.G. (25810)

Appearance	white powder
Assay	min. 99,0 %
Water	max. 0,2 %
Hazard Statements:	318, 410
EUH Statements:	
Precautionary Statements:	273, 280, 305+351+338, 391
Signal Word:	Warning
ADR/RID:	UN 3077 9 /M7 /III



Sodium acetate anhydrous

Chemical formula:	CH ₃ COONa
Relative molecular weight:	82,04
CAS:	127-09-3
EINECS:	204-823-8

A.G. (22750)

Appearance	white crystalline substance
Assay	min. 98,5 %
Loss on drying (110°C)	max. 1,5 %
Sulfate (SO ₄ ²⁻)	max. 0,005 %
Chloride (Cl ⁻)	max. 0,01 %
Fe (Iron)	max. 0,005 %
Pb (Lead)	max. 0,005 %

pure (22740)

Appearance	white crystalline substance
Assay	min. 98,0 %
Loss on drying (110°C)	max. 2,0 %
Sulfate (SO ₄ ²⁻)	max 0,02 %
Chloride (Cl ⁻)	max. 0,05 %

Sodium acetate trihydrate

Chemical formula:	CH ₃ COONa · 3 H ₂ O
Relative molecular weight:	136,08
CAS:	6131-90-4
EINECS:	204-823-8

A.G. (22770)

Appearance	white crystalline substance
Assay	min. 99,0 %
Insoluble matter in water	max. 0,005 %
pH (5% water solution, 25 °C)	7,5 - 9,0
Chloride (Cl ⁻)	max. 0,001 %
Sulfate (SO ₄ ²⁻)	max. 0,002 %
Fe (Iron)	max. 0,001 %
Heavy metals (as Pb)	max. 0,001 %

pure (22760)

Appearance	white crystalline substance
Assay	min. 99,0 %
Insoluble matter in water	max. 0,01 %
pH (5% water solution, 25 °C)	7,5 - 9,0

98%+ (43700)

Appearance	white crystalline substance
Assay	min. 98,0 %
Insoluble matter in water	max. 0,01 %
pH (5% water solution, 25 °C)	7,5 - 9,0

Sodium azide

Chemical formula:	NaN ₃
Relative molecular weight:	65,01
CAS:	26628-22-8
EINECS:	247-852-1

A.G. (10620)

Appearance	white crystalline substance
Assay	min. 99,0 %
Chloride (Cl ⁻)	max. 0,005 %
Sulfate (SO ₄ ²⁻)	max. 0,005 %
Fe (Iron)	max. 0,005 %
Pb (Lead)	max. 0,005 %

Hazard Statements:	300, 330, 310, 373, 400, 410
EUH Statements:	032
Precautionary Statements:	273, 280, 301+310, 302+352, 310
Signal Word:	Danger
ADR/RID:	UN 1687 6.1 /T5 /II



Sodium benzoate

Chemical formula:	C ₆ H ₅ COONa
Relative molecular weight:	144,11
CAS:	532-32-1
EINECS:	208-534-8

A.G. (10850)

Appearance	white powder
Assay (dried substance)	min. 99,8 %
Chloride (Cl ⁻)	max. 0,005 %
Sulfate (SO ₄ ²⁻)	max. 0,02 %
Heavy metals (as Pb)	max. 0,001 %
Fe (Iron)	max. 0,001 %
As (Arsenic)	max. 0,0002 %

Hazard Statements:	319
EUH Statements:	
Precautionary Statements:	264, 280, 305+351+338, 337+313
Signal Word:	Warning
ADR/RID:	



S

Sodium bromate

Chemical formula:	NaBrO ₃
Relative molecular weight:	150,89
CAS:	7789-38-0
EINECS:	232-160-4

pure

Appearance	white crystalline substance
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A.G. (11110)

Appearance	white crystalline substance
Assay	min. 99,0 %
Sulfate (SO ₄ ²⁻)	max. 0,05 %
Fe (Iron)	max. 0,005 %
Pb (Lead)	max. 0,005 %

pure

Assay	min. 99,0 %
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Hazard Statements:	272, 302, 315, 319, 335
EUH Statements:	
Precautionary Statements:	220, 261, 305+351+338
Signal Word:	Danger
ADR/RID:	UN 1494 5.1 /O2 /II



Sodium bromide

Chemical formula:	NaBr
Relative molecular weight:	102,9
CAS:	7647-15-6
EINECS:	231-599-9

A.G. (11180)

Appearance	white crystalline substance
Assay	min. 99,0 %
Chloride (Cl ⁻)	max. 0,1 %
Sulfate (SO ₄ ²⁻)	max. 0,005 %
Loss on drying	max. 1 %

pure (11170)

Appearance	white crystalline substance
Assay	min. 98,0 %

Sodium carbonate anhydrous

Chemical formula:	Na ₂ CO ₃
Relative molecular weight:	105,99
CAS:	497-19-8
EINECS:	207-838-8

A.G. (28010)

Appearance	white powder
Assay (dried substance)	min. 99,0 %
Loss on ignition (300°C)	max. 3,0 %
Chloride (Cl ⁻)	max. 0,005 %
Sulfate (SO ₄ ²⁻)	max. 0,005 %
Fe (Iron)	max. 0,0005 %
Heavy metals (as Pb)	max. 0,002 %

pure (28000)

Appearance	white powder
Assay (dried substance)	min. 99,0 %
Loss on ignition (300°C)	max. 5,0 %

Hazard Statements:	319
EUH Statements:	
Precautionary Statements:	305+351+338
Signal Word:	Warning
ADR/RID:	



Sodium carbonate decahydrate

Chemical formula:	Na ₂ CO ₃ · 10H ₂ O
Relative molecular weight:	286,14
CAS:	6132-02-1
EINECS:	207-838-8

A.G. (28030)

Appearance	white crystalline substance
Assay	min. 99,0 %
Chloride (Cl ⁻)	max. 0,001 %
Sulfate (SO ₄ ²⁻)	max. 0,002 %
Fe (Iron)	max. 0,001 %
Heavy metals (as Pb)	max. 0,001 %

pure (28020)

Appearance	white crystalline substance
Assay	min. 99,0 %

Hazard Statements:	319
EUH Statements:	
Precautionary Statements:	305+351+338
Signal Word:	Warning
ADR/RID:	



Sodium citrate dihydrate

Chemical formula:	HOC(COONa)(CH ₂ COONa) ₂ · 2 H ₂ O
Relative molecular weight:	294,1
CAS:	6132-04-3
EINECS:	200-675-3

A.G. (11470)

Appearance	white crystalline substance
Assay	min. 99,0 %
Insoluble matter in water	max. 0,005 %
Chloride (Cl ⁻)	max. 0,001 %
Sulfate (SO ₄ ²⁻)	max. 0,002 %
pH (5% water solution, 25 °C)	7,0 - 9,5

pure (11460)

Appearance	white crystalline substance
Assay	min. 98,0 %
Insoluble matter in water	max. 0,01 %
Chloride (Cl ⁻)	max. 0,005 %
Sulfate (SO ₄ ²⁻)	max. 0,005 %

99%+ (38880)

Appearance	white crystalline substance
Assay	min. 99,0 %
Insoluble matter in water	max. 0,01 %
Chloride (Cl ⁻)	max. 0,005 %
Sulfate (SO ₄ ²⁻)	max. 0,05 %
pH (5% water solution, 25 °C)	7,0 - 9,5

Sodium cyanide

Chemical formula:	NaCN
Relative molecular weight:	49,01
CAS:	143-33-9
EINECS:	205-599-4

A.G. (18370)

Appearance	white substance
Assay	min. 97,0 %
Chloride (Cl ⁻)	max. 0,05 %
Sulfate (SO ₄ ²⁻)	max. 0,05 %
Heavy metals (as Pb)	max. 0,05 %

pure (18350)

Appearance	white substance
Assay	min. 96,0 %

Hazard Statements:	290, 330, 310, 300, 315, 319, 372, 400, 410
EUH Statements:	032
Precautionary Statements:	270, 273, 280, 302+352, 301+310, 304+340

Signal Word:	Danger
ADR/RID:	UN 1689 6.1 /T5 /I



S

Sodium dihydrogenphosphate dihydrate

Chemical formula:	NaH ₂ PO ₄ · 2 H ₂ O
Relative molecular weight:	156,01
CAS:	13472-35-0
EINECS:	231-449-2

A.G. (12340)

Appearance	white crystalline substance
Assay	min. 99,0 %
Chloride (Cl ⁻)	max. 0,005 %
Sulfate (SO ₄ ²⁻)	max. 0,005 %
Fe (Iron)	max. 0,005 %
Heavy metals (as Pb)	max. 0,005 %
pH (5% water solution)	4,0 - 4,5
Appearance of solution (10% in water)	clear, colourless

pure (12330)

Appearance	white crystalline substance
Assay	min. 98,0 %
Chloride (Cl ⁻)	max. 0,2 %
Fe (Iron)	max. 0,05 %
Heavy metals (as Pb)	max. 0,005 %
pH (5% water solution)	4,0 - 4,5

Sodium dichloroisocyanurate dihydrate

Chemical formula:	C ₃ Cl ₂ N ₃ NaO ₃ · 2H ₂ O
Relative molecular weight:	255,98
CAS:	51580-86-0
EINECS:	220-767-7

A.G. (12430)

Appearance	white or almost white crystals
Assay (dried substance)	min. 98,0 %
Loss on drying (105°C)	9,0 - 16,0 %
Fe (Iron)	max. 0,005 %
Heavy metals (as Pb)	max. 0,001 %
Identification	passes test

Hazard Statements:	302, 319, 335, 410
EUH Statements:	031
Precautionary Statements:	261, 273, 280, 305+351+338
Signal Word:	Warning
ADR/RID:	UN 3077 9 /M7 /III



Sodium dichromate dihydrate

Chemical formula:	Na ₂ Cr ₂ O ₇ · 2 H ₂ O
Relative molecular weight:	298
CAS:	7789-12-0
EINECS:	234-190-3

A.G. (12530)

Appearance	orange crystalline substance
Assay	min. 99,5 %
Sulfate (SO ₄ ²⁻)	max. 0,01 %
Chloride (Cl ⁻)	max. 0,001 %
Insoluble matter in water	max. 0,005 %

pure (12520)

Appearance	orange crystalline substance
Assay	min. 98,0 %

Hazard Statements:	272, 350, 340, 360FD, 372, 330, 301, 312, 314, 334, 335, 317, 410
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EUH Statements:	
Precautionary Statements:	201, 273, 280, 220, 260
Signal Word:	Danger
ADR/RID:	UN 3086 6.1 /TO2 /I



Sodium disulfite

Chemical formula:	Na ₂ S ₂ O ₅
Relative molecular weight:	190,1
CAS:	7681-57-4
EINECS:	231-673-0

A.G. (12720)

Assay	min. 98,0 %
Chloride (Cl ⁻)	max. 0,005 %
Fe (Iron)	max. 0,001 %
Heavy metals (as Pb)	max. 0,001 %
pH (5% water solution, 20 °C)	3,5 - 5,0

pure (12710)

Assay	min. 95,0 %
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A.G. (12720)

Appearance	white crystalline substance
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pure (12710)

Appearance	white crystalline substance
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Hazard Statements:	302, 318
EUH Statements:	031
Precautionary Statements:	280, 305+351+338
Signal Word:	Danger
ADR/RID:	



Sodium dithionite

Chemical formula:	Na ₂ S ₂ O ₄
Relative molecular weight:	174,11
CAS:	7775-14-6
EINECS:	231-890-0

pure (12740)

Appearance	white powder
Assay	min. 80,0 %
Hazard Statements:	251, 302
EUH Statements:	031
Precautionary Statements:	370+378
Signal Word:	Danger
ADR/RID:	UN 1384 4.2 /S4 /II



Sodium dodecyl sulfate

Chemical formula:	CH ₃ (CH ₂) ₁₁ OSO ₃ Na
Relative molecular weight:	288,38
CAS:	151-21-3
EINECS:	205-788-1

A.G. (20820)

Appearance	white powder
Assay (dried substance)	min. 98,0 %
Loss on drying (105°C)	max. 5,0 %
Chloride (Cl ⁻)	max. 0,2 %
Fe (Iron)	max. 0,001 %
Heavy metals (as Pb)	max. 0,001 %

pure (20810)

Appearance	white powder
Assay (dried substance)	min. 96,0 %
Hazard Statements:	228, 302, 332, 315, 318, 335, 412
EUH Statements:	
Precautionary Statements:	210, 241, 305+351+338, 310, 405
Signal Word:	Danger
ADR/RID:	UN 1325 4.1 /F1 /III



S

Sodium fluoride

Chemical formula:	NaF
Relative molecular weight:	41,99
CAS:	7681-49-4
EINECS:	231-667-8

A.G. (14070)

Appearance	white powder
Assay	min. 99,0 %
Sulfate (SO ₄ ²⁻)	max. 0,01 %
Fe (Iron)	max. 0,005 %
Heavy metals	max. 0,005 %

pure (14060)

Appearance	white powder
Assay	min. 98,0 %
Fe (Iron)	max. 0,05 %

Hazard Statements:	301, 319, 315
EUH Statements:	032
Precautionary Statements:	260, 280, 305+351+338
Signal Word:	Danger
ADR/RID:	UN 1690 6.1 /T5 /III



Sodium formate

Chemical formula:	HCOONa
Relative molecular weight:	68,01
CAS:	141-53-7
EINECS:	205-488-0

A.G. (21870)

Appearance	white crystalline substance
Assay	min. 99,0 %
Chloride (Cl ⁻)	max. 0,001 %
Sulfate (SO ₄ ²⁻)	max. 0,002 %
Fe (Iron)	max. 0,0005 %
Heavy metals (as Pb)	max. 0,0005 %
pH (5% water solution, 25 °C)	7,0 - 8,5

98%+ (44870)

Appearance	white crystalline substance
Assay	min. 98,0 %
Chloride (Cl ⁻)	max. 0,001 %
Sulfate (SO ₄ ²⁻)	max. 0,002 %
Fe (Iron)	max. 0,005 %
Heavy metals (as Pb)	max. 0,005 %

Sodium hexametaphosphate

Chemical formula:	Na(PO ₃) ₆ · Na ₂ O
Relative molecular weight:	
CAS:	68915-31-1
EINECS:	272-808-3

pure (14760)

Appearance	white powder
Assay	min. 65 - 70 % P ₂ O ₅

Sodium hydrogencarbonate

Chemical formula:	NaHCO ₃
Relative molecular weight:	84,01
CAS:	144-55-8
EINECS:	205-633-8

[A.G. \(15350\)](#)

Appearance	white crystalline substance
Assay	min. 99,0 %
Chloride (Cl ⁻)	max. 0,02 %
Sulfate (SO ₄ ²⁻)	max. 0,01 %
Fe (Iron)	max. 0,001 %
Heavy metals (as Pb)	max. 0,001 %
Appearance of solution (8 g/100 ml)	clear, colourless

[pure \(15330\)](#)

Appearance	white crystalline substance
Assay	min. 98,0 %

Sodium hydrogensulfate monohydrate

Chemical formula:	NaHSO ₄ · H ₂ O
Relative molecular weight:	138,08
CAS:	10034-88-5
EINECS:	231-665-7

[A.G. \(15230\)](#)

Appearance	white crystalline substance
Assay	min. 99,0 %
Chloride (Cl ⁻)	max. 0,001 %
Fe (Iron)	max. 0,001 %
Heavy metals (as Pb)	max. 0,001 %

[pure \(15220\)](#)

Appearance	white crystalline substance
Assay	min. 99,0 %

Hazard Statements:	318
EUH Statements:	
Precautionary Statements:	280, 305+351+338
Signal Word:	Danger
ADR/RID:	UN 3260 8 /C2 /III



Sodium hydrogentartrate monohydrate

Chemical formula:	C ₄ H ₆ NaO ₆ · H ₂ O
Relative molecular weight:	190,09
CAS:	526-94-3
EINECS:	208-400-9

[A.G. \(15400\)](#)

Appearance	white crystalline substance
Assay	min. 99,0 %
Chloride (Cl ⁻)	max. 0,002 %
Sulfate (SO ₄ ²⁻)	max. 0,01 %
Fe (Iron)	max. 0,001 %
Ammonium (NH ₄ ⁺)	max. 0,005 %
Insoluble matter in water	max. 0,01 %

S

Sodium hydroxide pearls

Chemical formula:	NaOH
Relative molecular weight:	
CAS:	1310-73-2
EINECS:	215-185-5

A.G. (15790)

Appearance	white beads
Assay	min. 98,0 %
Na ₂ CO ₃	max. 1,5 %
Chloride (Cl ⁻)	max. 0,007 %
Sulfate (SO ₄ ²⁻)	max. 0,003 %
SiO ₂	max. 0,005 %
Fe (Iron)	max. 0,001 %
Heavy metals (as Ag)	max. 0,001 %
Total nitrogen (as N)	max. 0,0005 %

pure (33850)

Appearance	white beads
Assay	min 97,0 %
Na ₂ CO ₃	max. 1,5 %
Chloride (Cl ⁻)	max. 0,01 %
Sulfate (SO ₄ ²⁻)	max. 0,003 %
SiO ₂	max. 0,01 %
Total nitrogen (as N)	max. 0,001 %

Hazard Statements:	314, 290
EUH Statements:	
Precautionary Statements:	280, 310, 305+351+338
Signal Word:	Danger
ADR/RID:	UN 1823 8 /C6 /II



Sodium hydroxide pellets

Chemical formula:	NaOH
Relative molecular weight:	40
CAS:	1310-73-2
EINECS:	215-185-5

A.G. (15760)

Appearance	white pips
Assay	min. 98,0 %
Na ₂ CO ₃	max. 1,5 %
Chloride (Cl ⁻)	max. 0,007 %
Sulfate (SO ₄ ²⁻)	max. 0,003 %
SiO ₂	max. 0,005 %
Fe (Iron)	max. 0,001 %
Heavy metals (as Ag)	max. 0,001 %
Total nitrogen (as N)	max. 0,0005 %

pure (15740)

Appearance	white pips
Assay	min 97,0 %
Na ₂ CO ₃	max. 1,5 %
Chloride (Cl ⁻)	max. 0,01 %
Sulfate (SO ₄ ²⁻)	max. 0,003 %
SiO ₂	max. 0,01 %
Total nitrogen (as N)	max. 0,001 %

Hazard Statements:	314, 290
EUH Statements:	
Precautionary Statements:	280, 310, 305+351+338
Signal Word:	Danger
ADR/RID:	UN 1823 8 /C6 /II



Sodium hypochlorite solution

Chemical formula:	NaClO
Relative molecular weight:	74,44
CAS:	7681-52-9
EINECS:	231-668-3

pure (17080)

Appearance	clear yellow liquid
Active chlorine content	~ 11,0 %
Density (20 °C)	~ 1,205 g/cm ³

Hazard Statements:	290, 314, 410
EUH Statements:	031
Precautionary Statements:	260, 273, 280, 301+330+331, 304+340, 305+351+338

Signal Word:	Danger
ADR/RID:	UN 1791 8 /C9 /II



Sodium hypophosphite monohydrate

Chemical formula:	NaH ₂ PO ₂ · H ₂ O
Relative molecular weight:	105,99
CAS:	10039-56-2
EINECS:	231-669-9

A.G. (14360)

Appearance	white crystalline substance
Assay	min. 99,0 %
Chloride (Cl ⁻)	max. 0,02 %
Sulfate (SO ₄ ²⁻)	max. 0,02 %
Fe (Iron)	max. 0,001 %
Heavy metals (as Pb)	max. 0,001 %

Hazard Statements:

EUH Statements:

Precautionary Statements: 260, 262

Signal Word: Danger

ADR/RID:

Sodium chlorate

Chemical formula:	NaClO ₃
Relative molecular weight:	106,44
CAS:	7775-09-9
EINECS:	231-887-4

A.G. (16030)

Appearance	white crystalline substance
Assay	min. 99,0 %
Chloride (Cl ⁻)	max. 0,005 %
Sulfate (SO ₄ ²⁻)	max. 0,005 %
Fe (Iron)	max. 0,005 %
Heavy metals (as Pb)	max. 0,005 %

pure (16020)

Appearance	white crystalline substance
Assay	min. 98,0 %

Hazard Statements: 271, 302, 411

EUH Statements:

Precautionary Statements: 210, 220, 273

Signal Word: Danger

ADR/RID: UN 1495 5.1 /O2 /II



Sodium chloride

Chemical formula:	NaCl
Relative molecular weight:	58,44
CAS:	7647-14-5
EINECS:	231-598-3

A.G. (16610)

Appearance	white crystalline substance
Assay (dried substance)	min. 99,9 %
Loss on drying	max. 0,5 %
Insoluble matter in water	max. 0,005 %
Free acids (as HCl)	max. 0,0025 %
Free alkali (as NaOH)	max. 0,0025 %
Bromide (Br ⁻)	max. 0,01 %
Iodide (I ⁻)	max. 0,008 %
Sulfate (SO ₄ ²⁻)	max. 0,005 %
Ca (Calcium)	max. 0,005 %
Fe (Iron)	max. 0,0003 %
Mg (Magnesium)	max. 0,002 %
Heavy metals (as Pb)	max. 0,0005 %

S

Sodium chromate tetrahydrate

Chemical formula:	Na ₂ CrO ₄ · 4 H ₂ O
Relative molecular weight:	234,03
CAS:	10034-82-9
EINECS:	231-889-5

A.G. (17260)

Appearance	yellow crystalline substance
Assay	min. 99,5 %
Chloride (Cl ⁻)	max. 0,01%
Sulfate (SO ₄ ²⁻)	max. 0,01%
Fe (Iron)	max. 0,001 %

pure (17250)

Appearance	yellow crystalline substance
Assay	min. 98,5 %
Hazard Statements:	350, 340, 360FD, 330, 301, 312, 372, 314, 334, 317, 410

EUH Statements:	
Precautionary Statements:	201, 220, 273, 280, 260
Signal Word:	Danger
ADR/RID:	UN 3288 6.1 /T5 /II



Sodium iodate

Chemical formula:	NaIO ₃
Relative molecular weight:	197,9
CAS:	7681-55-2
EINECS:	231-672-5

A.G. (17620)

Appearance	white powder
Assay	min. 98,0 %
Sulfate (SO ₄ ²⁻)	max. 0,005 %
Fe (Iron)	max. 0,005 %
Pb (Lead)	max. 0,005 %

Hazard Statements:	272, 302, 334, 317
EUH Statements:	
Precautionary Statements:	220, 280, 261, 312
Signal Word:	Danger
ADR/RID:	UN 1479 5.1 /O2 /II



Sodium iodide

Chemical formula:	NaI
Relative molecular weight:	149,89
CAS:	7681-82-5
EINECS:	231-679-3

A.G. (17710)

Appearance	white powder
Assay (dried substance)	min. 99,5 %
Loss on drying (105°C)	max. 0,5 %
Insoluble matter in water	max. 0,005 %
Free alkali (Na ₂ CO ₃)	max. 0,05 %
Cl ⁻ , Br ⁻ (as Cl ⁻)	max. 0,02 %
Sulfate (SO ₄ ²⁻)	max. 0,01 %

pure (17700)

Appearance	white powder
Assay (dried substance)	min. 99,0 %
Loss on drying (105°C)	max. 0,5 %

Hazard Statements:	319, 315
EUH Statements:	
Precautionary Statements:	305+351+338
Signal Word:	Warning
ADR/RID:	



Sodium molybdate dihydrate

Chemical formula:	Na ₂ MoO ₄ · 2 H ₂ O
Relative molecular weight:	241,95
CAS:	10102-40-6
EINECS:	231-551-7

A.G. (21770)

Appearance	colourless crystals
Assay	min. 99,0 %
Chloride (Cl ⁻)	max. 0,005 %
Sulfate (SO ₄ ²⁻)	max. 0,05
Phosphate (PO ₄ ³⁻)	max. 0,001 %
Fe (Iron)	max. 0,001 %
Heavy metals (as Pb)	max. 0,001 %
pH (5% water solution, 25 °C)	7,5 - 10,0

pure (21760)

Appearance	colourless crystals
Assay	min. 98,5 %

Sodium nitrate

Chemical formula:	NaNO ₃
Relative molecular weight:	85,01
CAS:	7631-99-4
EINECS:	231-554-3

A.G. (13240)

Appearance	white crystalline substance
Assay	min. 99,5 %
pH (5% water solution, 20 °C)	5,5 - 8,0
Chloride (Cl ⁻)	max. 0,005 %
Sulfate (SO ₄ ²⁻)	max. 0,005 %
Fe (Iron)	max. 0,005 %
Heavy metals (as Pb)	max. 0,005 %
Insoluble matter in water (filt. 5 - 15 µm)	max. 0,005 %

pure (13230)

Appearance	white crystalline substance
Assay	min. 99,0 %

Hazard Statements:	272, 319
EUH Statements:	
Precautionary Statements:	220, 264, 280, 305+351+338, 370+378
Signal Word:	Warning
ADR/RID:	UN 1498 5.1 /O2 /III



Sodium nitrite

Chemical formula:	NaNO ₂
Relative molecular weight:	69
CAS:	7632-00-0
EINECS:	231-555-9

A.G. (13410)

Appearance	yellowish crystals
Assay	min. 98,0 %
Insoluble matter in water	max. 0,005 %
Sulfate (SO ₄ ²⁻)	max. 0,01 %
Chloride (Cl ⁻)	max. 0,01 %
Fe (Iron)	max. 0,0004 %
Heavy metals (as Pb)	max. 0,0005 %
K (Potassium)	max. 0,005 %

pure (13400)

Appearance	yellowish crystals
Assay	min. 98,0 %

Hazard Statements:	272, 301, 319, 400
EUH Statements:	
Precautionary Statements:	220, 273, 280, 305+351+338
Signal Word:	Danger
ADR/RID:	UN 1500 5.1 /OT2 /III



S

Sodium nitroprusside dihydrate

Chemical formula:	$\text{Na}_2[\text{Fe}(\text{CN})_5\text{NO}] \cdot 2 \text{H}_2\text{O}$
Relative molecular weight:	297,95
CAS:	13755-38-9
EINECS:	238-373-9

A.G. (22460)

Appearance	dark red crystals
Assay	min. 99,0 %
Chloride (Cl^-)	max. 0,01 %
Sulfate (SO_4^{2-})	max. 0,01 %
Hexacyanoferrate(II) $[\text{Fe}(\text{CN})_6]^{4-}$	max. 0,02 %
Hexacyanoferrate(III) $[\text{Fe}(\text{CN})_6]^{3-}$	max. 0,01 %

Hazard Statements:	301
EUH Statements:	
Precautionary Statements:	301+310
Signal Word:	Danger
ADR/RID:	UN 1588 6.1 /T5 /II



Sodium oxalate

Chemical formula:	$\text{C}_2\text{Na}_2\text{O}_4$
Relative molecular weight:	134
CAS:	62-76-0
EINECS:	200-550-3

A.G. (26780)

Appearance	white crystalline substance
Assay	min. 99,0 %
Chloride (Cl^-)	max. 0,005 %
Sulfate (SO_4^{2-})	max. 0,05 %
Fe (Iron)	max. 0,005 %
Heavy metals (as Pb)	max. 0,005 %

pure (26770)

Appearance	white crystalline substance
Assay	min. 98,0 %
Hazard Statements:	302, 312
EUH Statements:	
Precautionary Statements:	280
Signal Word:	Warning
ADR/RID:	



Sodium perborate tetrahydrate

Chemical formula:	$\text{NaBO}_3 \cdot 4 \text{H}_2\text{O}$
Relative molecular weight:	153,86
CAS:	10486-00-7
EINECS:	231-556-4

pure (23920)

Appearance	white powder
Assay	min. 97,0 %
Active oxygen content	9 - 11 %
Chloride (Cl^-)	max. 0,05 %
Sulfate (SO_4^{2-})	max. 0,15 %
Fe (Iron)	max. 0,005 %
Heavy metals (as Pb)	max. 0,005 %

Hazard Statements:	360Df, 335, 318
EUH Statements:	
Precautionary Statements:	280, 305+351+338, 310
Signal Word:	Danger
ADR/RID:	



Sodium perchlorate monohydrate

Chemical formula:	NaClO ₄ · H ₂ O
Relative molecular weight:	140,46
CAS:	7791-07-3
EINECS:	231-511-9

A.G. (31260)

Appearance	colourless crystals
Assay	min. 99,0 %
Cl ⁻ , ClO ₃ ⁻ (as Cl ⁻)	max. 0,05 %
Sulfate (SO ₄ ²⁻)	max. 0,005 %
Fe (Iron)	max. 0,005 %
Heavy metals (as Pb)	max. 0,005 %

pure (17010)

Appearance	colourless crystals
Assay	min. 98,0 %
pH (5% water solution)	4,5 - 7,0
Hazard Statements:	271, 302
EUH Statements:	
Precautionary Statements:	220
Signal Word:	Danger
ADR/RID:	UN 1502 5.1 /O2 /II



Sodium periodate

Chemical formula:	NaIO ₄
Relative molecular weight:	213,89
CAS:	7790-28-5
EINECS:	232-197-6

A.G. (17750)

Appearance	white crystalline substance
Assay (dried substance)	min. 99,5 %
Loss on drying (105°C)	max. 0,2 %
Chloride (Cl ⁻)	max. 0,02 %
Sulfate (SO ₄ ²⁻)	max. 0,005 %
Fe (Iron)	max. 0,001 %
Heavy metals (as Pb)	max. 0,001 %

Hazard Statements:	271, 314, 372, 410
EUH Statements:	
Precautionary Statements:	210, 220, 260, 280, 305+351+338, 405
Signal Word:	Danger
ADR/RID:	UN 3085 5.1 /OC2 /I



Sodium peroxodisulfate

Chemical formula:	Na ₂ S ₂ O ₈
Relative molecular weight:	238,1
CAS:	7775-27-1
EINECS:	231-892-1

A.G. (24080)

Appearance	white powder
Assay	min. 99,0 %
Chloride (Cl ⁻)	max. 0,005 %
Fe (Iron)	max. 0,005 %
Heavy metals (as Pb)	max. 0,005 %

pure (24070)

Appearance	white powder
Assay	min. 98,0 %
Hazard Statements:	272, 302, 319, 335, 315, 334, 317
EUH Statements:	
Precautionary Statements:	261, 280, 305+351+338, 337+313, 342+311
Signal Word:	Danger
ADR/RID:	UN 1505 5.1 /O2 /III



S

Sodium pyrophosphate decahydrate

Chemical formula:	$\text{Na}_4\text{P}_2\text{O}_7 \cdot 10 \text{H}_2\text{O}$
Relative molecular weight:	446,06
CAS:	13472-36-1
EINECS:	231-767-1

A.G. (24660)

Appearance	white crystalline matter
Assay	min. 99,0 %
Total nitrogen (as N)	max. 0,001 %
Chloride (Cl^-)	max. 0,001 %
Fe (Iron)	max. 0,0005 %
Heavy metals (as Pb)	max. 0,0005 %
Phosphate (PO_4^{3-})	max. 0,1 %
Sulfate (SO_4^{2-})	max. 0,005 %
K (Potassium)	max. 0,005 %

Hazard Statements: 302, 318

EUH Statements:

Precautionary Statements: 280, 305+351+338, 301+330+331, 308+313

Signal Word: Danger

ADR/RID:



Sodium pyruvate

Chemical formula:	$\text{CH}_3\text{COCOONa}$
Relative molecular weight:	110,04
CAS:	113-24-6
EINECS:	204-024-4

A.G. (24700)

Appearance	off-white substance
Assay	min. 98,0 %

Sodium salicylate

Chemical formula:	$\text{HOC}_6\text{H}_4\text{COONa}$
Relative molecular weight:	160,11
CAS:	54-21-7
EINECS:	200-198-0

A.G. (25010)

Appearance	white powder
Assay	min. 99,5 %
Loss on drying (110°C)	max. 0,5 %
Chloride (Cl^-)	max. 0,01 %
Sulfate (SO_4^{2-})	max. 0,06 %
Heavy metals (as Pb)	max. 0,0005 %

pure (30390)

Appearance	white powder
Assay	min. 99,0 %

for determination of ammonium (45580)

Appearance	white powder
Assay	min. 99,5 %
Loss on drying (110°C)	max. 0,5 %
Chloride (Cl^-)	max. 0,01 %
Sulfate (SO_4^{2-})	max. 0,06 %
Ammonium (NH_4^+)	max. 0,0002 %

Hazard Statements: 302, 315, 335, 319

EUH Statements:

Precautionary Statements: 280, 305+351+338

Signal Word: Warning

ADR/RID:



Sodium selenite pentahydrate

Chemical formula:	Na ₂ SeO ₃ · 5 H ₂ O
Relative molecular weight:	263
CAS:	26970-82-1
EINECS:	233-267-9

A.G. (25080)

Appearance	white crystalline substance
Assay	min. 99,0 %
Total nitrogen (as N)	max. 0,005 %
Chloride (Cl ⁻)	max. 0,005 %
Sulfate (SO ₄ ²⁻)	max. 0,005 %
Fe (Iron)	max. 0,001 %
Pb (Lead)	max. 0,0005 %

Hazard Statements:	300, 331, 317, 411
EUH Statements:	031
Precautionary Statements:	261, 264, 273, 280, 301+310, 311
Signal Word:	Danger
ADR/RID:	UN 2630 6.1 /T5 /I



Sodium sulfate anhydrous

Chemical formula:	Na ₂ SO ₄
Relative molecular weight:	142,04
CAS:	7757-82-6
EINECS:	231-820-9

A.G. (25770)

Appearance	white crystalline substance
Assay	min. 99,0 %
Loss on ignition (800°C)	max. 0,3 %
pH (5% water solution)	5,0 - 8,0
Chloride (Cl ⁻)	max. 0,005 %
Fe (Iron)	max. 0,001 %
Heavy metals (as Pb)	max. 0,001 %

pure (25760)

Appearance	white crystalline substance
Assay	min. 99,0 %

Sodium sulfate decahydrate

Chemical formula:	Na ₂ SO ₄ · 10 H ₂ O
Relative molecular weight:	322,2
CAS:	7727-73-3
EINECS:	231-820-9

A.G. (25790)

Appearance	white crystalline substance
Assay	min. 99,0 %
Loss on drying (130°C)	53 - 57 %
pH (5% water solution)	5,0 - 8,0
Chloride (Cl ⁻)	max. 0,001 %
Fe (Iron)	max. 0,001 %
Heavy metals (as Pb)	max. 0,001 %

pure (25780)

Appearance	white crystalline substance
Assay	min. 98,5 %

S

Sodium sulfide hydrate

Chemical formula:	Na ₂ S · aq
Relative molecular weight:	
CAS:	27610-45-3
EINECS:	215-211-5

[A.G. \(26670\)](#)

Appearance	orange flakes
Assay	60,0 - 62,0 %
Total nitrogen (as N)	max. 0,005 %
Sulfites (SO ₃ ²⁻)	max. 0,1 %
Thiosulfates (S ₂ O ₃ ²⁻)	max. 0,5 %

Hazard Statements:	302, 311, 314, 400
EUH Statements:	031
Precautionary Statements:	273, 280, 305+351+338, 310
Signal Word:	Danger
ADR/RID:	UN 1849 8 /C6 /II



Sodium sulfide nonahydrate

Chemical formula:	Na ₂ S · 9 H ₂ O
Relative molecular weight:	240,18
CAS:	1313-84-4
EINECS:	215-211-5

[ACS \(31910\)](#)

Appearance	colourless pieces with black mechanics
Assay	min. 98,0 %

[Železo \(test ACS\)](#)[passes test](#)

Ammonium (NH ₄ ⁺)	max. 0,005 %
SO ₃ ²⁻ a S ₂ O ₃ ²⁻ (as SO ₄ ²⁻)	max. 0,1 %

Hazard Statements:	302, 311, 314, 400
EUH Statements:	031
Precautionary Statements:	273, 280, 305+351+338, 310
Signal Word:	Danger
ADR/RID:	UN 1849 8 /C6 /II



Sodium sulfite anhydrous

Chemical formula:	Na ₂ SO ₃
Relative molecular weight:	126,04
CAS:	7757-83-7
EINECS:	231-821-4

[A.G. \(26040\)](#)

Appearance	off-white crystals
Assay	min. 98,0 %
Chloride (Cl ⁻)	max. 0,005 %
Fe (Iron)	max. 0,001 %
Heavy metals (as Pb)	max. 0,001 %

[pure \(26030\)](#)

Appearance	off-white crystals
Assay	min. 98,0 %

[for photo \(26050\)](#)

Appearance	off-white crystals
Assay	min. 98,0 %

Hazard Statements:	319
EUH Statements:	031
Precautionary Statements:	305+351+338
Signal Word:	Warning
ADR/RID:	



Sodium tetraborate decahydrate

Chemical formula:	Na ₂ B ₄ O ₇
Relative molecular weight:	381,37
CAS:	1303-96-4
EINECS:	215-540-4

A.G. (26930)

Appearance	white crystalline substance
Assay	min. 99,5 %
Chloride (Cl ⁻)	max. 0,002 %
Sulfate (SO ₄ ²⁻)	max. 0,005 %
Fe (Iron)	max. 0,0005 %
Heavy metals (as Pb)	max. 0,0005 %

pure (26920)

Appearance	white crystalline substance
Assay	min. 99,0 %

Hazard Statements:	360FD, 319
EUH Statements:	
Precautionary Statements:	201, 308+313 305+351+338
Signal Word:	Danger
ADR/RID:	



Sodium thiocyanate

Chemical formula:	NaSCN
Relative molecular weight:	81,07
CAS:	540-72-7
EINECS:	208-754-4

A.G. (27300)

Appearance	white crystalline substance
Assay	min. 98,0 %
Chloride (Cl ⁻)	max. 0,05 %
Sulfate (SO ₄ ²⁻)	max. 0,03 %
Fe (Iron)	max. 0,005 %
Heavy metals (as Pb)	max. 0,005 %

pure (27290)

Appearance	white crystalline substance
Assay	min. 97,5 %

Hazard Statements:	302, 312, 332, 412
EUH Statements:	032
Precautionary Statements:	273, 280
Signal Word:	Warning
ADR/RID:	



Sodium thiosulfate anhydrous

Chemical formula:	Na ₂ S ₂ O ₃
Relative molecular weight:	158,11
CAS:	7772-98-7
EINECS:	231-867-5

pure (27410)

Appearance	white crystalline substance
Assay	min. 98,0 %
Loss on drying (105°C)	max. 0,5 %

S

Sodium thiosulfate pentahydrate

Chemical formula:	Na ₂ S ₂ O ₃ · 5H ₂ O
Relative molecular weight:	248,18
CAS:	10102-17-7
EINECS:	231-867-5

A.G. (27440)

Appearance	colourless crystals
Assay	min. 99,0 %
pH (5% water solution)	6,0 - 8,5
Chloride (Cl ⁻)	max. 0,02 %
SO ₄ ²⁻ + SO ₃ ²⁻ (as SO ₄ ²⁻)	max. 0,2 %
Fe (Iron)	max. 0,005 %
Heavy metals (as Pb)	max. 0,005 %

pure (27430)

Appearance	colourless crystals
Assay	min. 99,0 %

Sodium tungstate dihydrate

Chemical formula:	Na ₂ WO ₄ · 2H ₂ O
Relative molecular weight:	329,87
CAS:	10213-10-2
EINECS:	236-743-4

A.G. (28400)

Appearance	white crystalline substance
Assay	min. 99,0 %
Free alkali (as NaOH)	max. 0,05 %
Total nitrogen (as N)	max. 0,001 %
Chloride (Cl ⁻)	max. 0,005 %
Sulfate (SO ₄ ²⁻)	max. 0,01 %
Fe (Iron)	max. 0,001 %
Pb (Lead)	max. 0,001 %
Co (Cobalt)	max. 0,001 %

Hazard Statements:	302
EUH Statements:	
Precautionary Statements:	
Signal Word:	Warning
ADR/RID:	



Sorbic acid

Chemical formula:	C ₆ H ₈ O ₂
Relative molecular weight:	112,13
CAS:	110-44-1
EINECS:	203-768-7

pure (20520)

Appearance	white crystalline substance
Assay	min. 99 %
Melting point	133 - 135 °C

Hazard Statements:	315, 319, 335
EUH Statements:	
Precautionary Statements:	261, 305+351+338
Signal Word:	Warning
ADR/RID:	



Sorbitol

Chemical formula:	C ₆ H ₁₄ O ₆
Relative molecular weight:	182,17
CAS:	50-70-4
EINECS:	200-061-5

99%+ (26260)

Appearance	almost white powder
Assay	min. 99,0 %
Melting point	98 - 100,5 °C
Ni (Nickel)	max. 0,0001 %
Pb (Lead)	max. 0,0005 %

98%+ (26250)

Appearance	almost white powder
Assay	min. 98,0 %
Loss on drying	max. 0,5 %

Starch soluble

Chemical formula:	(C ₆ H ₁₀ O ₅) _n
Relative molecular weight:	162,14
CAS:	9005-84-9
EINECS:	232-686-4

A.G. (26740)

Appearance	white powder
pH (2% water solution, 25 °C)	4,5 - 7,0
Insoluble matter in water	max. 0,1 %
Sulphated ash	max. 0,5 %
Loss on drying (105°C)	max. 15,0 %

pure (26730)

Appearance	white powder
Insoluble matter in water	max. 0,15%
Sulphated ash	max. 0,7 %
Loss on drying (105°C)	max. 17,0 %

Succinic acid

Chemical formula:	HOOCCH ₂ CH ₂ COOH
Relative molecular weight:	118,09
CAS:	110-15-6
EINECS:	203-740-4

A.G. (19680)

Appearance	white crystalline substance
Assay	min. 99,0 %
Sulphated ash	max. 0,05 %
Chloride (Cl ⁻)	max. 0,005 %
Sulfate (SO ₄ ²⁻)	max. 0,01 %
Fe (Iron)	max. 0,005 %
Heavy metals (as Pb)	max. 0,005 %

pure (37260)

Appearance	white crystalline substance
Assay	min. 98,5 %
Sulphated ash	max. 0,05 %
Chloride (Cl ⁻)	max. 0,005 %
Sulfate (SO ₄ ²⁻)	max. 0,02 %
Fe (Iron)	max. 0,005 %
Heavy metals (as Pb)	max. 0,005 %

Hazard Statements:	315, 318, 335
EUH Statements:	
Precautionary Statements:	280, 261, 305+351+338
Signal Word:	Danger
ADR/RID:	



S

Sucrose

Chemical formula:	$C_{12}H_{22}O_{11}$
Relative molecular weight:	342,3
CAS:	57-50-1
EINECS:	200-334-9

A.G. (24970)

Appearance	white crystalline substance
Assay	min. 99,8 %
Insoluble matter in water	max. 0,003 %
Residue on ignition	max. 0,01 %
Chloride (Cl ⁻)	max. 0,001 %
Sulfate (SO ₄ ²⁻)	max. 0,005 %
Invert sugar	max. 0,1 %

Sudan Black B

Chemical formula:	
Relative molecular weight:	
CAS:	
EINECS:	

indicator (11660)

Appearance	black powder
C. I. No.	26150

Sudan III

Chemical formula:	$C_{22}H_{16}N_4O$
Relative molecular weight:	352,4
CAS:	85-86-9
EINECS:	201-638-4

indicator (26530)

Appearance	red powder
C. I. No.	26100

Sulfanilic acid

Chemical formula:	H ₂ NC ₆ H ₄ SO ₃ H
Relative molecular weight:	173,19
CAS:	121-57-3
EINECS:	204-482-5

A.G. (20560)

Appearance	almost white powder
Assay	min. 99,0 %
Sulphated ash	max. 0,02 %
Chloride (Cl ⁻)	max. 0,002 %
Sulfate (SO ₄ ²⁻)	max. 0,005 %
Nitrite (NO ₂ ⁻)	max. 0,001 %

pure (20550)

Appearance	almost white powder
Assay	min. 99,0 %
Hazard Statements:	319, 317, 315
EUH Statements:	
Precautionary Statements:	280, 302+352, 305+351+338
Signal Word:	Warning
ADR/RID:	



5-Sulfosalicylic acid dihydrate

Chemical formula:	HOC ₆ H ₃ (SO ₃ H)COOH · 2 H ₂ O
Relative molecular weight:	254,22
CAS:	5965-83-3
EINECS:	202-555-6

A.G. (18510)

Appearance	white crystalline substance
Assay	min. 98,5 %
Chloride (Cl ⁻)	max. 0,005 %
Fe (Iron)	max. 0,005 %
Pb (Lead)	max. 0,005 %
Melting point	105 - 112 °C

pure (18500)

Appearance	white crystalline substance
Assay	min. 98,0 %
Hazard Statements:	302, 319, 335, 315
EUH Statements:	
Precautionary Statements:	305+351+338, 337+313, 280
Signal Word:	Warning
ADR/RID:	



Sulfur precipitated

Chemical formula:	S
Relative molecular weight:	32,06
CAS:	7704-34-9
EINECS:	231-722-6

A.G. (25200)

Appearance	yellow powder
Assay	min. 99,0 %
Residue on ignition	max. 0,2 %
Chloride (Cl ⁻)	max. 0,005 %
Sulfate (SO ₄ ²⁻)	max. 0,005 %
Fe (Iron)	max. 0,005 %

tested acc. to Ph. Eur. (43670)

Appearance	yellow powder
Assay	99,0 - 101,0 %
Sulphated ash	max. 0,2 %
Chloride (Cl ⁻)	max. 0,01 %
Sulfate (SO ₄ ²⁻)	max. 0,01 %
Melting point	~ 120 °C

Hazard Statements:	315, 228
EUH Statements:	
Precautionary Statements:	210, 280, 302+352, 332+313
Signal Word:	Warning
ADR/RID:	UN 1350 4.1 / F3 / III



S

Sulfuric acid 96%

Chemical formula:	H ₂ SO ₄
Relative molecular weight:	98,08
CAS:	7664-93-9
EINECS:	231-639-5

chemically pure (20420)

Appearance	clear colourless liquid
Assay	min. 96,0 %
Total nitrogen (as N)	max. 0,0001 %
Chloride (Cl ⁻)	max. 0,0001 %
Fe (Iron)	max. 0,00005 %
Heavy metals (as Pb)	max. 0,0002 %
Substances reducing KMnO ₄ (as SO ₂)	max. 0,0005 %

A.G. (20450)

Appearance	clear colourless liquid
Assay	min. 96,0 %
Chloride (Cl ⁻)	max. 0,0001 %
Fe (Iron)	max. 0,0001 %
Heavy metals (as Pb)	max. 0,0005 %
Substances reducing KMnO ₄ (as SO ₂)	max. 0,0005 %

pure (20370)

Appearance	clear colourless liquid
Assay	min. 96,0 %
Chloride (Cl ⁻)	max. 0,0005 %
Fe (Iron)	max. 0,0005 %
Heavy metals (as Pb)	max. 0,0005 %

ACS (43430)

Appearance	clear colourless liquid
Assay	min. 96,0 %
Color scale (APHA)	max. 10
Residue on ignition	max. 5 ppm
Chloride (Cl ⁻)	max. 0,2 ppm
Nitrate (NO ₃ ⁻)	max. 0,5 ppm
Ammonium (NH ₄ ⁺)	max. 2 ppm
Substances reducing KMnO ₄	max. 2 ppm
As (Arsenic)	max. 0,01 ppm
Heavy metals	max. 1 ppm
Fe (Iron)	max. 0,2 ppm
Hg (Mercury)	max. 5 ppb

technical (20500)

Appearance	colourless to brownish liquid
Assay	min. 95,0 %

semiconductor grade (20490)

Appearance	clear colourless liquid
Assay	min. 96,0 %
Color scale (APHA)	max. 10 APHA
Residue on ignition	max. 3 ppm
Chloride (Cl ⁻)	max. 0,1 ppm
Substances reducing KMnO ₄ (as SO ₂)	max. 2 ppm
As (Arsenic)	max. 0,005 ppm
Fe (Iron)	max. 0,01 ppm
Heavy metals	max. 0,05 ppm
Nitrogen (as NH ₃)	max. 0,1 ppm

Hazard Statements: 314

EUH Statements:

Precautionary Statements: 280, 305+351+338, 310, 301+330+331

Signal Word: Danger

ADR/RID: UN 1830 8 /C1 /II



Sulfuric acid for determination of N

Chemical formula:	H ₂ SO ₄
Relative molecular weight:	98,08
CAS:	7664-93-9
EINECS:	231-639-5

A.G. (20360)

Appearance	clear colourless liquid
Assay	min. 97,5 - 98,5 %
Total nitrogen (as N)	max. 0,0001 %
Chloride (Cl ⁻)	max. 0,0001 %
Fe (Iron)	max. 0,00005 %
Pb (Lead)	max. 0,0002 %

Hazard Statements: 314

EUH Statements:

Precautionary Statements: 280, 305+351+338, 310, 301+330+331

Signal Word: Danger

ADR/RID: UN 1830 8 /C1 /II



Sulfuric acid solution 90-91% for milk analysis

Chemical formula:	H ₂ SO ₄
Relative molecular weight:	98,08
CAS:	7664-93-9
EINECS:	231-639-5

A.G. (20400)

Appearance	clear colourless liquid
Assay	90,0 - 91,0 %
Density (20 °C)	1,814 - 1,820 g/cm ³
Chloride (Cl ⁻)	max. 0,0002 %
Fe (Iron)	max. 0,0005 %
Heavy metals (as Pb)	max. 0,0002 %
Substances reducing KMnO ₄ (as SO ₂)	max. 0,001 %

Hazard Statements:	314
EUH Statements:	
Precautionary Statements:	280, 301+330+331, 305+351+338, 310
Signal Word:	Danger
ADR/RID:	UN 1830 8 /C1 /II



Sulfurous acid solution 5-6% in water

Chemical formula:	H ₂ SO ₃
Relative molecular weight:	82,08
CAS:	7782-99-2
EINECS:	231-973-1

A.G. (20510)

Appearance	clear colourless liquid
SO ₂ content	5,0 - 6,0 %
Ash	max. 0,002 %
Chloride (Cl ⁻)	max. 0,001 %
Fe (Iron)	max. 0,001 %
Heavy metals (as Pb)	max. 0,001 %
As (Arsenic)	max. 0,0005 %
Density (20 °C)	1,023 g/cm ³

Hazard Statements:	314
EUH Statements:	
Precautionary Statements:	280, 305+351+338, 301+330+331, 310
Signal Word:	Danger
ADR/RID:	UN 1833 8 /C1 /II



T

Talc

Chemical formula:	Mg ₃ Si ₄ O ₁₀ (OH) ₂
Relative molecular weight:	379,27
CAS:	14807-96-6
EINECS:	238-877-9

[See below \(25180\)](#)

Appearance	almost white powder
Loss on ignition	max. 10.0%
Soluble substances in water	max. 0.2%
Titrate acid or base	max. 0.5 ml 0.1 mol/l NaOH
Ca (Calcium)	max. 0.9%
Fe (Iron)	max. 0.25%
Mg (Magnesium)	17.0 - 19.5%
Pb (Lead)	max. 10 µg/g

Tartaric acid

Chemical formula:	COOH(CHOH) ₂ COOH
Relative molecular weight:	150,09
CAS:	87-69-4
EINECS:	201-766-0

[A.G. \(20750\)](#)

Appearance	white crystalline substance
Assay	min. 99,5 %
Sulphated ash	max. 0,02 %
Insoluble matter in water	max. 0,005 %
Sulfate (SO ₄ ²⁻)	max. 0,01 %
Fe (Iron)	max. 0,0005 %
Heavy metals (as Pb)	max. 0,0005 %

[pure \(20730\)](#)

Appearance	white crystalline substance
Assay	min. 99,0 %
Sulphated ash	max. 0,05 %
Insoluble matter in water	max. 0,01 %
Sulfate (SO ₄ ²⁻)	max. 0,02 %
Fe (Iron)	max. 0,001 %

Hazard Statements:	319, 335, 315
EUH Statements:	
Precautionary Statements:	280, 305+351+338
Signal Word:	Warning
ADR/RID:	



Tetrahydrofuran

Chemical formula:	C ₄ H ₈ O
Relative molecular weight:	72,11
CAS:	109-99-9
EINECS:	203-726-8

[A.G. \(27070\)](#)

Appearance	clear colorless liquid
Assay	min. 99,8 %
Water	max. 0,1 %
Residue after evaporation	max. 0,005 %
Boiling point	65 - 67 °C
Density (20 °C)	0,887 g/cm ³
Refractive index	1,408
Stabilizer	2,6-di-terc-butyl-p-kresol ~ 0,03 %

[pure \(27030\)](#)

Appearance	clear colorless liquid
Assay	min. 99,0 %
Water	max. 0,1 %
Boiling point	65 - 67 °C
Density (20 °C)	0,887 g/cm ³
Refractive index	1,408
Stabilizer	2,6-di-terc-butyl-p-kresol ~ 0,03 %

[ACS \(27020\)](#)

Appearance	clear liquid
Color scale (APHA)	max. 20
Assay	min. 99,0 %
Water	max. 0,05 %
Residue after evaporation	max. 0,03 %
Density (20 °C)	0,89 g/cm ³
Refractive index	1,408
Peroxides	max. 0,015 %
Stabilizer	BHT ~ 250 ppm

Hazard Statements:	225, 319, 335, 351
EUH Statements:	019
Precautionary Statements:	210, 243, 305+351+338
Signal Word:	Danger
ADR/RID:	UN 2056 3 / F1 / II



Tetrachloroethylene

Chemical formula:	C ₂ Cl ₄
Relative molecular weight:	165,83
CAS:	127-18-4
EINECS:	204-825-9

A.G. (27110)

Appearance	clear colorless liquid
Assay	min. 99,9 %
Free acids (as HCl)	max. 0,001 %
Water	max. 0,005 %
Residue after evaporation	max. 0,01 %
Boiling point	120 - 122 °C
Density (20 °C)	1,622 g/cm ³
Refractive index	1,506

pure (27100)

Appearance	clear colorless liquid
Assay	min. 99,8 %
Boiling point	120 - 122 °C
Density (20 °C)	1,622 g/cm ³
Refractive index	1,505

for UV (27130)

Appearance	clear colorless liquid
Assay	min. 99,9 %
Free acids (as HCl)	max. 0,001 %
Water	max. 0,005 %
Residue after evaporation	max. 0,01 %
Boiling point	120 - 122 °C
Density (20 °C)	1,622 g/cm ³
Refractive index	1,506
Transmittance at 290 nm	min. 10 %
Transmittance at 295 nm	min. 50 %
Transmittance at 300 nm	min. 80 %
Transmittance at 305 nm	min. 85 %
Transmittance at 350 nm	min. 89 %

Hazard Statements:	351, 411
EUH Statements:	
Precautionary Statements:	273, 280
Signal Word:	Warning
ADR/RID:	UN 1897 6.1 /T1 /III



Tetrylammonium bromide

Chemical formula:	C ₈ H ₂₀ BrN
Relative molecular weight:	210,16
CAS:	71-91-0
EINECS:	200-769-4

pure

Appearance	white crystalline substance
Assay	min. 98.0%
Infrared spectrometry	passes test

Hazard Statements:	315, 319, 335
EUH Statements:	
Precautionary Statements:	261, 305+351+338
Signal Word:	Warning
ADR/RID:	



Thioglycolic acid

Chemical formula:	HSCH ₂ COOH
Relative molecular weight:	92,12
CAS:	68-11-1
EINECS:	200-677-4

A.G. (20670)

Appearance	clear colourless liquid
Assay	~ 80,0 %
Sulphated ash	max. 0,05 %
Density (20 °C)	1,265 g/cm ³
Refractive index	1,471

Hazard Statements:	331, 311, 301, 314
EUH Statements:	
Precautionary Statements:	280, 284, 305+351+338, 301+330+331, 310
Signal Word:	Danger
ADR/RID:	UN 1940 8 /C3 /II



T

Thionylchloride

Chemical formula: SOCl_2
 Relative molecular weight: 118,97
 CAS: 7719-09-7
 EINECS: 231-748-8

pure (27340)

Appearance: clear yellowish liquid
 Identification: passes test
 Assay: min. 97,0 %

Hazard Statements: 331, 302, 314, 335
 EUH Statements: 014, 029
 Precautionary Statements: 280, 301+330+331, 305+351+338, 310
 Signal Word: Danger
 ADR/RID: UN 1836 8 /C1 /I



Thiourea

Chemical formula: $\text{CH}_4\text{N}_2\text{S}$
 Relative molecular weight: 76,12
 CAS: 62-56-6
 EINECS: 200-543-5

A.G. (27320)

Appearance: white crystalline substance
 Assay: min. 99,0 %
 Melting point: 170 - 182 °C
 Sulphated ash: max. 0,1 %

pure (27310)

Appearance: white crystalline substance
 Assay: min. 98,0 %

Hazard Statements: 302, 351, 361d, 411
 EUH Statements:
 Precautionary Statements: 273, 280
 Signal Word: Warning
 ADR/RID: UN 3077 9 /M7 /III



Thymol

Chemical formula: $\text{C}_{10}\text{H}_{14}\text{O}$
 Relative molecular weight: 150,22
 CAS: 89-83-8
 EINECS: 201-944-8

A.G. (27460)

Appearance: white crystalline substance
 Assay: min. 99,0 %
 Melting point: 48 - 51 °C
 Sulphated ash: max. 0,1 %

pure (27450)

Appearance: white crystalline substance
 Assay: min. 98,0 %

Hazard Statements: 302, 314, 411
 EUH Statements:
 Precautionary Statements: 273, 280, 305+351+338, 310
 Signal Word: Warning
 ADR/RID: UN 3261 8 /C4 /III



Tin(II) chloride dihydrate

Chemical formula:	SnCl ₂ · 2 H ₂ O
Relative molecular weight:	225,63
CAS:	10025-69-1
EINECS:	231-868-0

A.G. (16130)

Appearance	white crystalline substance
Assay	min. 98,0 %
Insoluble matter in HCl	max. 0,01 %
Sulfate (SO ₄ ²⁻)	max. 0,002 %
Fe (Iron)	max. 0,002 %
Pb (Lead)	max. 0,005 %

98%+ (35070)

Appearance	white crystalline substance
Assay	min. 98,0 %
Insoluble matter in HCl	max. 0,01 %
Sulfate (SO ₄ ²⁻)	max. 0,002 %
Fe (Iron)	max. 0,005 %
Pb (Lead)	max. 0,01 %

pure (16120)

Appearance	white crystalline substance
Assay	min. 97,0 %
Hazard Statements:	302+312, 314, 317, 318, 335, 373, 412, 290
EUH Statements:	
Precautionary Statements:	260, 280, 303+361+353, 305+351+338, 310
Signal Word:	Danger
ADR/RID:	UN 3260 8 /C2 /III



Tin(II) sulfate

Chemical formula:	SnSO ₄
Relative molecular weight:	214,75
CAS:	7488-55-3
EINECS:	231-302-2

A.G. (37920)

Appearance	yellowish crystals
Assay	min. 96,0 %
Chloride (Cl ⁻)	max. 0,01 %
Fe (Iron)	max. 0,005 %
Pb (Lead)	max. 0,005 %

Hazard Statements:	319, 335, 315, 317, 332, 373, 412
EUH Statements:	
Precautionary Statements:	260, 280, 301+330+331, 303+361+353, 305+351+338, 310
Signal Word:	Warning
ADR/RID:	



Titanium(IV) chloride

Chemical formula:	TiCl ₄
Relative molecular weight:	189,69
CAS:	7550-45-0
EINECS:	231-441-9

A.G. (16680)

Appearance	almost colourless liquid
Assay	min. 99,0 %
Boiling point	135 - 136 °C
Density (20 °C)	1,730 g/cm ³

pure (16670)

Appearance	almost colourless liquid
Assay	min. 98,0 %
Hazard Statements:	314
EUH Statements:	014
Precautionary Statements:	280, 305+351+338, 301+330+331, 310
Signal Word:	Danger
ADR/RID:	UN 1838 6.1 /TC3 /I



T

Titanium(IV) oxide

Chemical formula:	TiO ₂
Relative molecular weight:	79,9
CAS:	13463-67-7
EINECS:	236-675-5

A.G. (23430)

Appearance	white to greyish powder
Assay	min. 99,0 %
Loss on drying (105°C)	max. 0,5 %
Fe (Iron)	max. 0,005 %

Hazard Statements:	351
EUH Statements:	
Precautionary Statements:	201, 308+311
Signal Word:	Warning
ADR/RID:	



Toluene

Chemical formula:	C ₇ H ₈
Relative molecular weight:	92,14
CAS:	108-88-3
EINECS:	203-625-9

A.G. (27530)

Appearance	clear colorless liquid
Assay	min. 99,0 %
Residue after evaporation	max. 0,002 %
Total S	max. 0,003 %
Cloud temperature	max. 10 °C
Density (20 °C)	0,865 - 0,868 g/cm ³
Refractive index	1,497
Flash point	4 °C

pure (27520)

Appearance	clear colorless liquid
Assay	min. 99,0 %

for UV (27550)

Appearance	clear colorless liquid
Assay	min. 99,6 %
Residue after evaporation	max. 0,001 %
Water	max. 0,01 %
Transmittance at 285 nm	min. 10 %
Transmittance at 290 nm	min. 50 %
Transmittance at 300 nm	min. 80 %
Transmittance at 310 nm	min. 90 %
Transmittance at 350 nm	min. 99 %

ACS (27500)

Appearance	clear colorless liquid
Assay	min. 99,5 %
Color scale (APHA)	max. 10
Residue after evaporation	max. 0,001 %
Substances darkened by H ₂ SO ₄	passes test
Total S	max. 0,003 %
Water	max. 0,03 %

Hazard Statements:	225, 361d, 304, 373, 315, 336
EUH Statements:	
Precautionary Statements:	210, 261, 280, 301+310, 331
Signal Word:	Danger
ADR/RID:	UN 1294 3 /F1 /II



4-Toluenesulfonic acid monohydrate

Chemical formula:	CH ₃ C ₆ H ₄ SO ₃ H · H ₂ O
Relative molecular weight:	190,22
CAS:	6192-52-5
EINECS:	203-180-0

A.G. (18460)

Appearance	white or almost white crystalline powder
Assay	min. 98,5 %
Sulfate (SO ₄ ²⁻)	max. 0,3 %
Fe (Iron)	max. 0,01 %
Heavy metals (as Pb)	max. 0,001 %

pure (18450)

Appearance	white or almost white crystalline powder
Assay	min. 98,0 %

Hazard Statements:	290, 314, 412
EUH Statements:	
Precautionary Statements:	234, 260, 273, 280, 303+361+353, 305+351+338
Signal Word:	Danger
ADR/RID:	UN 2585 8 /C4 /III



o-Tolidine

Chemical formula:	C ₁₄ H ₁₆ N ₂
Relative molecular weight:	212,3
CAS:	119-93-7
EINECS:	204-358-0

A.G. (23000)

Appearance	beige powder
Assay	min. 98,0 %
Melting point	129 - 134 °C

Hazard Statements:	302, 350, 411
EUH Statements:	
Precautionary Statements:	273, 201, 308+313
Signal Word:	Danger
ADR/RID:	UN 3077 9 /M7 /III



o-Toluidine

Chemical formula:	C ₇ H ₉ N
Relative molecular weight:	107,2
CAS:	95-53-4
EINECS:	202-429-0

A.G. (30360)

Appearance	reddish orange liquid
Assay	min. 99,0 %
Sulphated ash	max. 0,01 %
Water	max. 0,3 %
Boiling point (11 Torr)	89 - 90 °C
Density (20 °C)	0,998 g/cm ³
Refractive index	1,572

pure (23010)

Appearance	reddish orange liquid
Assay	min. 98,0 %

Hazard Statements:	331, 301, 319, 350, 400
EUH Statements:	
Precautionary Statements:	273, 301+310, 305+351+338
Signal Word:	Danger
ADR/RID:	UN 1708 6.1 /T1 /II



p-Toluidine

Chemical formula:	C ₇ H ₉ N
Relative molecular weight:	107,16
CAS:	106-49-0
EINECS:	203-403-1

pure (24370)

Appearance	slabě hnědé krystalky
Assay	min. 99,0 %
Melting point	42 - 45 °C

Hazard Statements:	331, 311, 301, 319, 317, 351, 400
EUH Statements:	
Precautionary Statements:	273, 280, 305+351+338
Signal Word:	Danger
ADR/RID:	UN 3451 6.1 /T2 /II



T

Triethanolamine

Chemical formula:	C ₆ H ₁₅ NO ₃
Relative molecular weight:	149,2
CAS:	102-71-6
EINECS:	203-049-8

A.G. (27590)

Appearance	clear colourless viscous liquid
Assay	min. 99,0 %
Diethanolamine	max. 0,5 %
Ethanolamine	max. 0,1 %
Water	max. 0,1 %
Heavy metals (as Pb)	max. 0,001 %
Melting point	20 - 22 °C
Density (20 °C)	1,124 g/cm ³
Refractive index	1,485

pure (27570)

Appearance	clear colourless viscous liquid
Assay	min. 97,0 %
Hazard Statements:	315, 319, 335
EUH Statements:	
Precautionary Statements:	305+351+338
Signal Word:	Warning
ADR/RID:	



Triethanolamine hydrochloride

Chemical formula:	C ₆ H ₁₅ NO ₃ · HCl
Relative molecular weight:	185,7
CAS:	637-39-8
EINECS:	211-284-2

pure (27580)

Appearance	white crystalline substance
Assay	min. 99,0 %
Sulphated ash	max. 0,01 %
Melting point	178 - 179 °C
pH (5% water solution)	4,0 - 5,5

Triethylamine

Chemical formula:	C ₆ H ₁₅ N
Relative molecular weight:	101,2
CAS:	121-44-8
EINECS:	204-469-4

A.G. (27620)

Appearance	clear colorless liquid
Assay	min. 99,0
Residue after evaporation	max. 0,005 %
Water	max. 0,3 %
Boiling point	88 - 89 °C
Density (20 °C)	0,727 g/cm ³
Refractive index	1,401

pure (27610)

Appearance	clear colorless liquid
Assay	min. 99,0 %
Hazard Statements:	225, 302, 311, 331, 314, 318, 335
EUH Statements:	
Precautionary Statements:	210, 280, 303+361+353, 304+340, 305+351+338, 310
Signal Word:	Danger
ADR/RID:	UN 1296 3 /FC /II



Trichloroacetic acid

Chemical formula:	Cl ₃ CCOOH
Relative molecular weight:	163,29
CAS:	76-03-9
EINECS:	200-927-2

A.G. (20720)

Appearance	white crystalline substance
Assay	min. 99,5 %
Sulphated ash	max. 0,03 %
Chloride (Cl ⁻)	max. 0,003 %
Sulfate (SO ₄ ²⁻)	max. 0,03 %
Fe (Iron)	max. 0,0005 %
Heavy metals (as Pb)	max. 0,0005 %
Melting point	54 - 58 °C

pure (20700)

Appearance	white crystalline substance
Assay	min. 99,0 %

ACS (37970)

Assay	min. 99,0 %
Appearance of solution	clear, colourless
Insoluble matter	max. 0,01 %
Residue on ignition	max. 0,03 %
Chloride (Cl ⁻)	max. 0,002 %
Nitrate (NO ₃ ⁻)	max. 0,002 %
Phosphate (PO ₄ ³⁻)	max. 0,0005 %
Sulfate (SO ₄ ²⁻)	max. 0,02 %
Fe (Iron)	max. 0,001 %
Heavy metals (as Pb)	max. 0,002 %
Substances darkened by H ₂ SO ₄	passes test
Melting point	57 - 58 °C
Hazard Statements:	314, 410, 335
EUH Statements:	
Precautionary Statements:	273, 280, 305+351+338, 303+361+353, 301+330+331, 310
Signal Word:	Danger
ADR/RID:	UN 1839 8 /C4 /II



Tri-potassium phosphate monohydrate

Chemical formula:	K ₃ PO ₄ · H ₂ O
Relative molecular weight:	230,29
CAS:	27176-10-9
EINECS:	231-907-1

A.G. (14260)

Appearance	white crystalline substance
Assay	min. 95,0 %
Loss on ignition (500°C)	max. 13,0 %
Chloride (Cl ⁻)	max. 0,005 %
Sulfate (SO ₄ ²⁻)	max. 0,02 %
Fe (Iron)	max. 0,005 %
Heavy metals (as Pb)	max. 0,005 %
Appearance of solution (10% in water)	clear, colourless

pure (14250)

Appearance	white crystalline substance
Assay	min. 94,0 %

Hazard Statements:	318, 315
EUH Statements:	
Precautionary Statements:	280, 305+351+338
Signal Word:	Danger
ADR/RID:	



Tris(hydroxymethyl)aminomethane

Chemical formula:	C ₄ H ₁₁ NO ₃
Relative molecular weight:	121,14
CAS:	77-86-1
EINECS:	201-064-4

A.G. (27700)

Appearance	white crystalline substance
Assay	min. 99,5 %
Sulphated ash	max. 0,05 %
Melting point	167 - 172 °C
pH (10% water solution)	10,5 - 11,0
Water	max. 0,5 %
Fe (Iron)	max. 0,0005 %
Heavy metals (as Pb)	max. 0,0005 %

pure (27690)

Appearance	white crystalline substance
Assay	min. 99,0 %

Hazard Statements:	315, 319, 335
EUH Statements:	
Precautionary Statements:	261, 305+351+338
Signal Word:	Warning
ADR/RID:	



T

Tri-sodium phosphate dodecahydrate

Chemical formula:	Na ₃ PO ₄ · 12 H ₂ O
Relative molecular weight:	380,12
CAS:	10101-89-0
EINECS:	231-509-8

A.G. (14310)

Assay	min. 98,0 %
Free alkali (as NaOH)	max. 2,0 %
Chloride (Cl ⁻)	max. 0,005 %
Sulfate (SO ₄ ²⁻)	max. 0,005 %
Fe (Iron)	max. 0,005 %
Heavy metals (as Pb)	max. 0,005 %
Appearance of solution (10% in water)	clear, colourless

pure (14300)

Appearance	white crystalline substance
Assay	min. 97,0 %
Hazard Statements:	315, 319, 335
EUH Statements:	
Precautionary Statements:	261, 280, 305+351+338, 302+352
Signal Word:	Warning
ADR/RID:	



Urea

Chemical formula:	NH ₂ CONH ₂
Relative molecular weight:	60,06
CAS:	57-13-6
EINECS:	200-315-5

A.G. (21420)

Appearance	white substance
Assay	min. 99,5 %
Sulphated ash	max. 0,05 %
Melting point	132 - 135 °C
Biuret	max. 0,1 %
Chloride (Cl ⁻)	max. 0,002 %
Sulfate (SO ₄ ²⁻)	max. 0,005 %
Fe (Iron)	max. 0,0001 %
Heavy metals (as Pb)	max. 0,0001 %

pure (21410)

Appearance	white substance
Assay (N)	min. 46,0 %

Vanillin

Chemical formula:	C ₈ H ₈ O ₃
Relative molecular weight:	152,15
CAS:	121-33-5
EINECS:	204-465-2

pure (28110)

Appearance	white crystalline substance
Assay	min. 98,0 %
Melting point	81 - 83 °C
Hazard Statements:	302, 317, 319
EUH Statements:	
Precautionary Statements:	280, 305+351+338
Signal Word:	Warning
ADR/RID:	



Woods metal

Chemical formula:	
Relative molecular weight:	
CAS:	76093-98-6
EINECS:	231-152-8

pure (28410)

Appearance	light grey crystals
Melting point	73 - 77 °C
Hazard Statements:	302, 330, 341, 350, 361FD, 362, 372, 410
EUH Statements:	
Precautionary Statements:	201, , 304+340, 310, 391
Signal Word:	Danger
ADR/RID:	UN 3288 6.1 /T5 /II



X,Y

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Xylene

Chemical formula:	C ₈ H ₁₀
Relative molecular weight:	106,17
CAS:	1330-20-7
EINECS:	215-535-7

A.G. (28440)

Appearance	clear colorless liquid
Assay	min. 99,0 %
Residue after evaporation	max. 0,002 %
Boiling point	137 - 140 °C
Cloud temperature	max. 10 °C
Density (20 °C)	0,865 - 0,867 g/cm ³
Refractive index	1,496 - 1,499
Flash point	25 °C

pure (28430)

Appearance	clear colorless liquid
Assay	min. 98,0 %
Boiling point	137 - 144 °C
Cloud temperature	max. 10 °C
Density (20 °C)	0,855 - 0,865 g/cm ³

ACS (40460)

Appearance	clear colorless liquid
Assay	min. 98,5 %
Color scale (APHA)	max. 10
Residue after evaporation	max. 0,002 %
Substances darkened by H ₂ SO ₄	passes test
Sulfur compounds	max. 0,003 %
Density (20 °C)	0,865 - 0,867 g/cm ³
Refractive index	1,496 - 1,499
Water	max. 0,05 %

* isomers of xylene and ethylbenzene,
ethylbenzene max. 25%

Hazard Statements: 226, 304, 312, 332, 315, 319, 335,
373

EUH Statements:

Precautionary Statements: 210, 280, 302+352, 310

Signal Word: Danger

ADR/RID: UN 1307 3 /F1 /III



Yttrium(III) oxide

Chemical formula:	Y ₂ O ₃
Relative molecular weight:	225,82
CAS:	1314-36-9
EINECS:	215-233-5

See below (23470)

Appearance	white powder
Assay	min. 97,0%
Hazard Statements:	315, 319, 335
EUH Statements:	
Precautionary Statements:	261, 305+351+338
Signal Word:	Warning
ADR/RID:	



Zinc acetate dihydrate

Chemical formula:	(CH ₃ COO) ₂ Zn · 2 H ₂ O
Relative molecular weight:	219,5
CAS:	5970-45-6
EINECS:	209-170-2

A.G. (22830)

Appearance	white crystalline substance
Assay	min. 99,0 %
Chloride (Cl ⁻)	max. 0,001 %
Sulfate (SO ₄ ²⁻)	max. 0,005 %
Fe (Iron)	max. 0,001 %
Cu (Copper)	max. 0,002 %
Pb (Lead)	max. 0,002 %
Ca (Calcium)	max. 0,001 %
Na (Sodium)	max. 0,005 %
K (Potassium)	max. 0,005 %

pure (22810)

Appearance	white crystalline substance
Assay	min. 98,5 %
Chloride (Cl ⁻)	max. 0,005 %
Sulfate (SO ₄ ²⁻)	max. 0,005 %

Hazard Statements:	302, 319, 410
EUH Statements:	
Precautionary Statements:	273, 305+351+338
Signal Word:	Warning
ADR/RID:	UN 3077 9 /M7 /III



Zinc carbonate basic

Chemical formula:	[ZnCO ₃] ₂ · [Zn(OH) ₂] ₃
Relative molecular weight:	548,96
CAS:	5263-02-5
EINECS:	226-076-7

pure (28080)

Appearance	white powder
Assay (Zn)	56,0 - 58,0 %
Chloride (Cl ⁻)	max. 0,05 %
Sulfate (SO ₄ ²⁻)	max. 0,5 %
Na (Sodium)	max. 0,2 %

Zinc granulated

Chemical formula:	Zn
Relative molecular weight:	65,38
CAS:	7440-66-6
EINECS:	231-175-3

ACS (43120)

Appearance	metallic grey granules
Assay	min. 99,9 %
Fe (Iron)	max. 0,01 %
Pb (Lead)	max. 0,01 %

Zinc chloride anhydrous

Chemical formula:	ZnCl ₂
Relative molecular weight:	136,29
CAS:	7646-85-7
EINECS:	231-592-0

A.G. (16830)

Appearance	off-white crystals
Assay	min. 98,0 %
Insoluble matter in HCl	max. 0,005 %
Sulfate (SO ₄ ²⁻)	max. 0,005 %
Fe (Iron)	max. 0,005 %
Pb (Lead)	max. 0,005 %

98,5%+ (44780)

Appearance	off-white crystals
Assay	min. 98,5 %
Insoluble matter in HCl	max. 0,005 %
Sulfate (SO ₄ ²⁻)	max. 0,01 %
Fe (Iron)	max. 0,005 %
Pb (Lead)	max. 0,005 %

pure (16820)

Appearance	off-white crystals
Assay	min. 98,0 %

Hazard Statements:	302, 314, 335, 410
EUH Statements:	
Precautionary Statements:	273, 280, 305+351+338
Signal Word:	Danger
ADR/RID:	UN 2331 8 /C2 /III



Z

Zinc nitrate hexahydrate

Chemical formula:	Zn(NO ₃) ₂ · 6 H ₂ O
Relative molecular weight:	297,48
CAS:	10196-18-6
EINECS:	231-943-8

A.G. (13360)

Appearance	white crystalline substance
Assay	min. 99,0 %
Chloride (Cl ⁻)	max. 0,005 %
Sulfate (SO ₄ ²⁻)	max. 0,005 %
Fe (Iron)	max. 0,005 %
Heavy metals (as Pb)	max. 0,005 %

pure (13350)

Appearance	white crystalline substance
Assay	min. 98,0 %
Chloride (Cl ⁻)	max. 0,01 %
Hazard Statements:	272, 302, 319, 335, 315
EUH Statements:	
Precautionary Statements:	220, 261, 305+351+338
Signal Word:	Danger
ADR/RID:	UN 1514 5.1 /O2 /II



Zinc oxide

Chemical formula:	ZnO
Relative molecular weight:	81,38
CAS:	1314-13-2
EINECS:	215-222-5

A.G. (23480)

Appearance	white powder
Assay (on ignition subst.)	min. 99,0 %
Chloride (Cl ⁻)	max. 0,002 %
Sulfate (SO ₄ ²⁻)	max. 0,005 %
Fe (Iron)	max. 0,005 %
Heavy metals (as Pb)	max. 0,005 %

tested acc. to Ph. Eur. (40330)

Appearance	white powder
Assay (on ignition subst.)	99,0 - 100,5 %
Loss on ignition (500°C)	max. 1,0 %
As (Arsenic)	max. 0,0005 %
Cd (Cadmium)	max. 0,001 %
Fe (Iron)	max. 0,02 %
Heavy metals (as Pb)	max. 0,005 %
Hazard Statements:	410
EUH Statements:	
Precautionary Statements:	273
Signal Word:	Warning
ADR/RID:	UN 3077 9 /M7 /III



Zinc powder

Chemical formula:	Zn
Relative molecular weight:	65,38
CAS:	7440-66-6
EINECS:	231-175-3

A.G. (21950)

Appearance	grey powder
Assay	min. 95,0 %
Fe (Iron)	max. 0,005 %
Pb (Lead)	max. 0,005 %

pure (28620)

Appearance	grey powder
Assay	min. 90,0 %
Hazard Statements:	260, 250, 410
EUH Statements:	
Precautionary Statements:	233, 273, 370+378
Signal Word:	Danger
ADR/RID:	UN 1436 4.3 /WS /II



Zinc sulfate heptahydrate

Chemical formula:	ZnSO ₄ · 7 H ₂ O
Relative molecular weight:	287,54
CAS:	7446-20-0
EINECS:	231-793-3

A.G. (25880)

Appearance	white crystalline substance
Assay	min. 99,0 %
Insoluble matter in water	max. 0,005 %
pH (5% water solution)	4,4 - 6,0
Chloride (Cl ⁻)	max. 0,005 %
Fe (Iron)	max. 0,005 %
Heavy metals (as Pb)	max. 0,005 %

pure (25870)

Appearance	white crystalline substance
Assay	min. 99,0 %

tested acc. to Ph. Eur.

Appearance	white crystalline substance
Assay	99,0 - 100,5 %
Loss on ignition (500°C)	max. 1,0 %
As (Arsenic)	max. 0,0005 %
Cd (Cadmium)	max. 0,001 %
Fe (Iron)	max. 0,02 %
Heavy metals (as Pb)	max. 0,005 %

Hazard Statements:	302, 318, 410
EUH Statements:	
Precautionary Statements:	280, 273, 305+351+338
Signal Word:	Danger
ADR/RID:	UN 3077 9 /M7 /III



Zinc sulfate monohydrate

Chemical formula:	ZnSO ₄ · H ₂ O
Relative molecular weight:	179,5
CAS:	7446-19-7
EINECS:	231-793-3

A.G. (25890)

Appearance	white powder
Assay	min. 99,0 %
Chloride (Cl ⁻)	max. 0,01 %
Fe (Iron)	max. 0,01 %
Heavy metals (as Pb)	max. 0,01 %

Hazard Statements:	302, 318, 410
EUH Statements:	
Precautionary Statements:	273, 280, 305+351+338
Signal Word:	Danger
ADR/RID:	UN 3077 9 /M7 /III





Pentanal[®], volumetric solutions
and buffers

Pentanal

penta[®] CHEMICALS
UNLIMITED[®]

PENTANAL Sodium thiosulfate

Catalog Number	Concentration (mol/l)	Packaging
44540-00000	0,01	1 ampoule
44110-00000	0,1	1 ampoule

PENTANAL Ammonium thiocyanate

Catalog Number	Concentration (mol/l)	Packaging
44360-00000	0,1	1 ampoule

PENTANAL Potassium permanganate

Catalog Number	Concentration (mol/l)	Packaging
44520-00000	0,002	1 ampoule
44120-00000	0,02	1 ampoule
44530-00000	0,2	1 ampoule

PENTANAL Oxalic acid

Catalog Number	Concentration (mol/l)	Packaging
44500-00000	0,005	1 ampoule
44510-00000	0,05	1 ampoule

PENTANAL Sulfuric acid

Catalog Number	Concentration (mol/l)	Packaging
44460-00000	0,05	1 ampoule
44470-00000	0,1	1 ampoule
44480-00000	0,25	1 ampoule
44490-00000	0,5	1 ampoule

PENTANAL Hydrochloric acid

Catalog Number	Concentration (mol/l)	Packaging
44440-00000	0,01	1 ampoule
44050-00000	0,1	1 ampoule
44450-00000	0,5	1 ampoule
44130-00000	1	1 ampoule

PENTANAL Complexone III

Catalog Number	Concentration (mol/l)	Packaging
44100-00000	0,01	1 ampoule
44430-00000	0,05	1 ampoule
44090-00000	0,1	1 ampoule

PENTANAL Sodium hydroxide

Catalog Number	Concentration (mol/l)	Packaging
44080-00000	0,1	1 ampoule
44400-00000	0,2	1 ampoule
44410-00000	0,25	1 ampoule
44420-00000	0,5	1 ampoule
44070-00000	1	1 ampoule

PENTANAL Potassium hydroxide

Catalog Number	Concentration (mol/l)	Packaging
44250-00000	0,1	1 ampoule

PENTANAL Silver nitrate

Catalog Number	Concentration (mol/l)	Packaging
44060-00000	0,1	1 ampoule

PENTANAL Mercury(II) nitrate

Catalog Number	Concentration (mol/l)	Packaging
44240-00000	0,05	1 ampoule

Volumetric Solutions

POTASSIUM DICHROMATE ready to use volumetric solution

Catalog Number	Concentration (mol/l)	Packaging
44890-11000	1/60	1000 ml

SODIUM THIOSULFATE ready to use volumetric solution

Catalog Number	Concentration (mol/l)	Packaging
27370-11000	0,001	1000 ml
27380-11000	0,01	1000 ml
27390-11000	0,1	1000 ml
27400-11000	1	1000 ml

MAGNESIUM SULFATE ready to use volumetric solution

Catalog Number	Concentration (mol/l)	Packaging
25490-11000	0,05	1000 ml
25500-11000	0,01	1000 ml

CERIUM(IV) SULFATE ready to use volumetric solution

Catalog Number	Concentration (mol/l)	Packaging
25270-11000	0,1	1000 ml

POTASSIUM PERMANGANATE ready to use volumetric solution

Catalog Number	Concentration (mol/l)	Packaging
21000-12500	0,02	2500 ml
21000-11000	0,02	1000 ml

OXALIC ACID ready to use volumetric solution

Catalog Number	Concentration (mol/l)	Packaging
31660-11000	0,05	1000 ml
20610-11000	0,5	1000 ml

SULFURIC ACID ready to use volumetric solution

Catalog Number	Concentration (mol/l)	Packaging
20240-11000	0,05	1000 ml
20250-11000	0,1	1000 ml
20260-11000	0,25	1000 ml
20270-11000	0,5	1000 ml
31820-11000	2,5	1000 ml

HYDROCHLORIC ACID ready to use volumetric solution

Catalog Number	Concentration (mol/l)	Packaging
19390-11000	0,01	1000 ml
19410-11000	0,1	1000 ml
19330-11000	0,5	1000 ml
19450-11000	1	1000 ml

COMPLEXONE III ready to use volumetric solution

Catalog Number	Concentration (mol/l)	Packaging
18030-11000	0,01	1000 ml
18040-11000	0,05	1000 ml
18050-11000	0,1	1000 ml

IODINE ready to use volumetric solution

Catalog Number	Concentration (mol/l)	Packaging
17580-11000	0,05	1000 ml
17590-11000	0,025	1000 ml

POTASSIUM CHLORIDE ready to use volumetric solution

Catalog Number	Concentration (mol/l)	Packaging
16150-11000	0,075	1000 ml
16180-11000	3	1000 ml

SODIUM HYDROXIDE ready to use volumetric solution

Catalog Number	Concentration (mol/l)	Packaging
15610-11000	0,1	1000 ml
15630-11000	0,25	1000 ml
15640-11000	0,5	1000 ml
15650-11000	1	1000 ml

POTASSIUM HYDROXIDE ready to use volumetric solution

Catalog Number	Concentration (mol/l)	Packaging
15450-11000	0,1	1000 ml

SILVER NITRATE ready to use volumetric solution

Catalog Number	Concentration (mol/l)	Packaging
13260-11000	0,01	1000 ml
13280-11000	0,1	1000 ml

Volumetric Solutions

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MERCURY(II) NITRATE ready to use volumetric solution

Catalog Number	Concentration (mol/l)	Packaging
13200-11000	0,05	1000 ml

POTASSIUM IODATE ready to use volumetric solution

Catalog Number	Concentration (mol/l)	Packaging
17600-11000	0,1	1000 ml

ACETIC ACID ready to use volumetric solution

Catalog Number	Concentration (mol/l)	Packaging
19950-11000	1	1000 ml

MAGNESIUM SULFATE ready to use volumetric solution

Catalog Number	Concentration (mol/l)	Packaging
25490-11000	0,05	1000 ml

PENTANAL phthalate buffer pH 4

Catalog Number	Packaging
23810-10100	100 ml

PENTANAL phosphate buffer pH 7

Catalog Number	Packaging
23820-10100	100 ml

PENTANAL borate buffer pH 9

Catalog Number	Packaging
23830-10100	100 ml

PHTHALATE BUFFER pH 4 ORANGE COLORED

Catalog Number	Packaging
24480-11000	1000 ml

ACETATE BUFFER pH 4 WALPOLE

Catalog Number	Packaging
32810-11000	1000 ml

PHOSPHATE BUFFER pH 6,8 (SÖRENSEN)

Catalog Number	Packaging
24430-11000	1000 ml

PHOSPHATE BUFFER pH 7,0 (SÖRENSEN) GREEN COLORED

Catalog Number	Packaging
24450-11000	1000 ml

PBS BUFFER pH 7,2-7,4

Catalog Number	Packaging
24520-11000	1000 ml

AMMONIUM BUFFER pH 10

Catalog Number	Packaging
24550-11000	1000 ml

BUFFER SOLUTION (CLARK-LUBS) pH 10

Catalog Number	Packaging
24540-11000	1000 ml

BORATE BUFFER pH 9 BLUE COLORED

Catalog Number	Packaging
24400-11000	1000 ml



GHS hazard statements
GHS precautionary statements

Hazard statements

H200	Unstable explosives.
H201	Explosive; mass explosion hazard.
H202	Explosive, severe projection hazard.
H203	Explosive; fire, blast or projection hazard.
H204	Fire or projection hazard.
H205	May mass explode in fire.
H220	Extremely flammable gas.
H221	Flammable gas.
H222	Extremely flammable aerosol.
H223	Flammable aerosol.
H224	Extremely flammable liquid and vapour.
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H228	Flammable solid.
H229	Pressurised container: May burst if heated.
H230	May react explosively even in the absence of air.
H231	May react explosively even in the absence of air at elevated pressure and/or temperature.
H240	Heating may cause an explosion.
H241	Heating may cause a fire or explosion.
H242	Heating may cause a fire.
H250	Catches fire spontaneously if exposed to air.
H251	Self-heating: may catch fire.
H252	Self-heating in large quantities; may catch fire.
H260	In contact with water releases flammable gases which may ignite spontaneously.
H261	In contact with water releases flammable gases.
H270	May cause or intensify fire; oxidiser.
H271	May cause fire or explosion; strong oxidiser.
H272	May intensify fire; oxidiser.
H280	Contains gas under pressure; may explode if heated.
H281	Contains refrigerated gas; may cause cryogenic burns or injury.
H290	May be corrosive to metals.
H300	Fatal if swallowed.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H310	Fatal in contact with skin.
H311	Toxic in contact with skin.
H312	Harmful in contact with skin.

H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H331	Toxic if inhaled.
H332	Harmful if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H340	May cause genetic defects.
H341	Suspected of causing genetic defects.
H350	May cause cancer.
H351	Suspected of causing cancer.
H360	May damage fertility or the unborn child.
H361	Suspected of damaging fertility or the unborn child.
H362	May cause harm to breast-fed children.
H370	Causes damage to organs.
H371	May cause damage to organs.
H372	Causes damage to organs through prolonged or repeated exposure.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
H413	May cause long lasting harmful effects to aquatic life.
H420	Harms public health and the environment by destroying ozone in the upper atmosphere.
EUH001	Explosive when dry.
EUH014	Reacts violently with water.
EUH018	In use may form flammable/explosive vapour-air mixture.
EUH019	May form explosive peroxides.
EUH044	Risk of explosion if heated under confinement.
EUH029	Contact with water liberates toxic gas.
EUH031	Contact with acids liberates toxic gas.
EUH032	Contact with acids liberates very toxic gas.
EUH066	Repeated exposure may cause skin dryness or cracking.
EUH070	Toxic by eye contact.

EUH071	Corrosive to the respiratory tract.
EUH059	Hazardous to the ozone layer.
EUH201/201A	Contains lead. Should not be used on surfaces liable to be chewed or sucked by children. Warning! Contains lead.
EUH202	Cyanoacrylate. Danger. Bonds skin and eyes in seconds. Keep out of the reach of children.
EUH203	Contains chromium (VI). May produce an allergic reaction.
EUH204	Contains isocyanates. May produce an allergic reaction.
EUH205	Contains epoxy constituents. May produce an allergic reaction.
EUH206	Warning! Do not use together with other products. May release dangerous gases (chlorine).
EUH207	Warning! Contains cadmium. Dangerous fumes are formed during use. See information supplied by the manufacturer. Comply with the safety instructions.
EUH208	Contains (name of sensitising substance). May produce an allergic reaction.
EU-H209/209A	Can become highly flammable in use. Can become flammable in use.
EUH210	Safety data sheet available on request.
EUH401	To avoid risks to human health and the environment, comply with the instructions for use.

Precautionary statements

P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
P103	Read label before use.
P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P211	Do not spray on an open flame or other ignition source.
P220	Keep/Store away from clothing/.../combustible materials.
P221	Take any precaution to avoid mixing with combustibles...
P222	Do not allow contact with air.
P223	Do not allow contact with water.
P230	Keep wetted with...
P231	Handle under inert gas.
P232	Protect from moisture.
P233	Keep container tightly closed.
P234	Keep only in original container.
P235	Keep cool.
P240	Ground/bond container and receiving equipment.
P241	Use explosion-proof electrical/ventilating/lighting/.../equipment.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P244	Keep valves and fittings free from oil and grease.
P250	Do not subject to grinding/shock/.../friction.
P251	Do not pierce or burn, even after use.
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P262	Do not get in eyes, on skin, or on clothing.
P263	Avoid contact during pregnancy/while nursing.
P264	Wash... thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
P272	Contaminated work clothing should not be allowed out of the workplace.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P282	Wear cold insulating gloves/face shield/eye protection.
P283	Wear fire/flame resistant/retardant clothing.

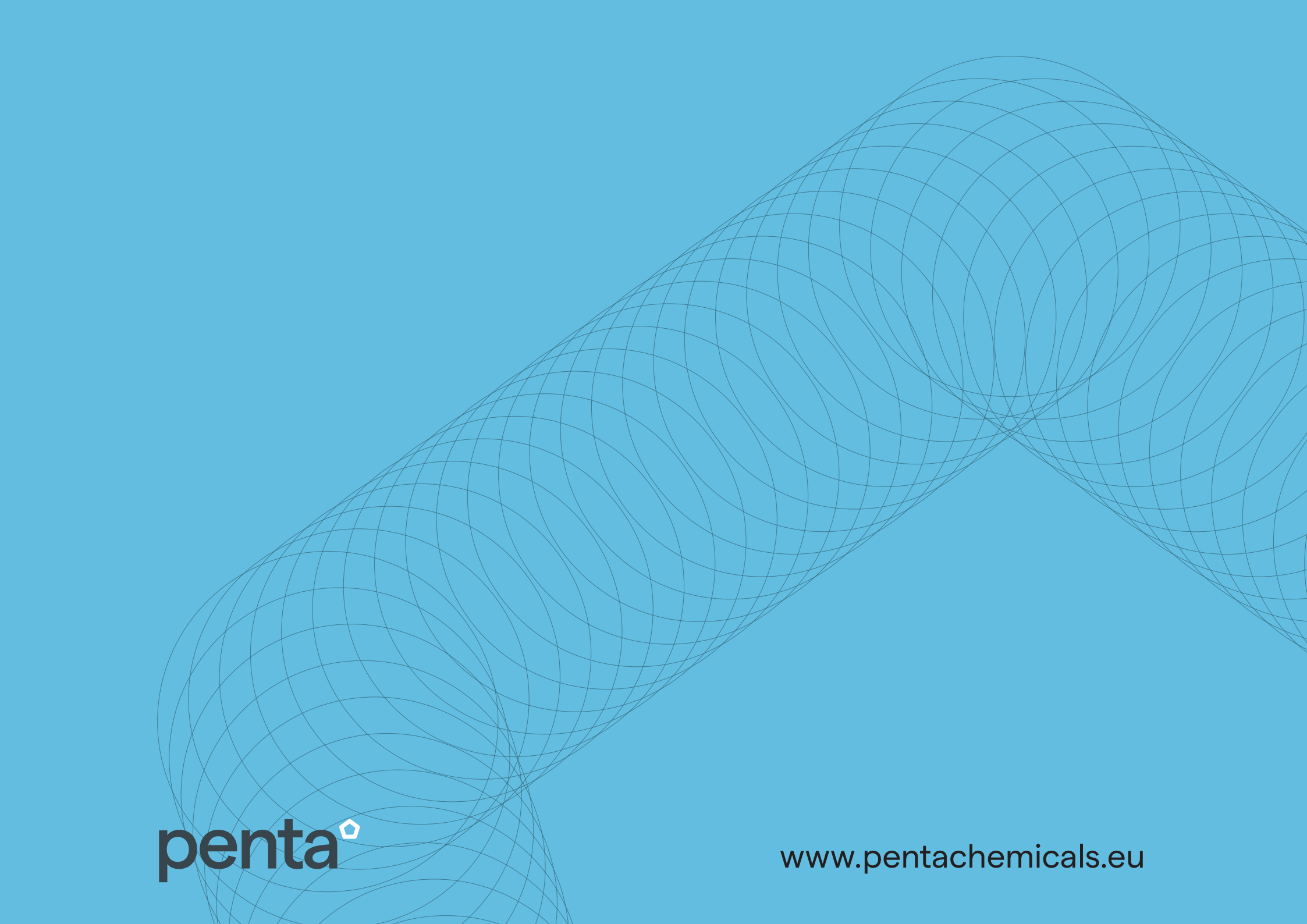
P284	Wear respiratory protection.
P231+P232	Handle under inert gas. Protect from moisture.
P235+P410	Keep cool. Protect from sunlight.
P301	IF SWALLOWED:
P302	IF ON SKIN:
P303	IF ON SKIN (or hair):
P304	IF INHALED:
P305	IF IN EYES:
P306	IF ON CLOTHING:
P308	IF exposed or concerned:
P310	Immediately call a POISON CENTER/doctor/...
P311	Call a POISON CENTER/ doctor/.../if you feel unwell.
P312	Call a POISON CENTER/ doctor/.../if you feel unwell.
P313	Get medical advice/attention.
P315	Get immediate medical advice/attention.
P320	Specific treatment is urgent (see... on this label).
P321	Specific treatment (see... on this label).
P330	Rinse mouth.
P331	Do NOT induce vomiting.
P332	If skin irritation occurs:
P333	If skin irritation or rash occurs:
P334	Immerse in cool water/wrap in wet bandages.
P335	Brush off loose particles from skin.
P336	Thaw frosted parts with lukewarm water. Do not rub affected area.
P337	If eye irritation persists:
P338	Remove contact lenses, if present and easy to do. Continue rinsing.
P340	Remove person to fresh air and keep comfortable for breathing.
P341	If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
P342	If experiencing respiratory symptoms:
P351	Rinse cautiously with water for several minutes.
P352	Wash with plenty of water/...
P353	Rinse skin with water/shower.
P360	Rinse immediately contaminated clothing and skin with plenty of water before removing clothes.
P361	Take off immediately all contaminated clothing.
P362	Take off contaminated clothing.
P363	Wash contaminated clothing before reuse.
P364	And wash it before reuse.

P370	In case of fire:
P371	In case of major fire and large quantities:
P372	Explosion risk in case of fire.
P373	DO NOT fight fire when fire reaches explosives.
P374	Fight fire with normal precautions from a reasonable distance.
P375	Fight fire remotely due to the risk of explosion.
P376	Stop leak if safe to do so.
P377	"Leaking gas fire: Do not extinguish, unless leak can be stopped safely.
P378	Use... to extinguish.
P380	Evacuate area.
P381	Eliminate all ignition sources if safe to do so.
P390	Absorb spillage to prevent material damage.
P391	Collect spillage.
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P301+P312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P301+P330+P331	IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P302+P334	IF ON SKIN: Immerse in cool water/wrap in wet bandages.
P302+P350	IF ON SKIN: Gently wash with plenty of soap and water.
P303+P361+P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P306+P360	IF ON CLOTHING: rinse immediately contaminated clothing and skin with plenty of water before removing clothes.
P308+P311	IF exposed or concerned: Call a POISON CENTER/ doctor/...
P308+P313	IF exposed or concerned: Get medical advice/attention.
P332+P313	If skin irritation occurs: Get medical advice/attention.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P335+P334	Brush off loose particles from skin. Immerse in cool water/wrap in wet bandages.
P337+P313	If eye irritation persists: Get medical advice/attention.
P342+P311	If experiencing respiratory symptoms: Call a POISON CENTER/ doctor/...
P361 + P364	Take off immediately all contaminated clothing and wash it before reuse.

Precautionary statements

P362 + P364	Take off contaminated clothing and wash it before reuse.
P370+P376	In case of fire: Stop leak if safe to do so.
P370+P378	In case of fire: Use... for extinction.
P370+P380	In case of fire: Evacuate area.
P370+P380+P375	In case of fire: Evacuate area. Fight fire remotely due to the risk of explosion.
P371+P380+P375	In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.
P401	Store...
P402	Store in a dry place.
P403	Store in a well-ventilated place.
P404	Store in a closed container.
P405	Store locked up.
P406	Store in corrosive resistant/... container with a resistant inner liner.
P407	Maintain air gap between stacks/pallets.
P410	Protect from sunlight.
P411	Store at temperatures not exceeding...°C/...°F.
P412	Do not expose to temperatures exceeding 50°C/ 122°F.
P413	Store bulk masses greater than... kg/... lbs at temperatures not exceeding...°C/...°F.
P420	Store away from other materials.
P422	Store contents under...
P402+P404	Store in a dry place. Store in a closed container.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P403+P235	Store in a well-ventilated place. Keep cool.
P410+P403	Protect from sunlight. Store in a well-ventilated place.
P410+P412	Protect from sunlight. Do not expose to temperatures exceeding 50°C/ 122°F.
P411+P235	Store at temperatures not exceeding...°C/...°F. Keep cool.
P501	Dispose of contents/container to...
P502	Refer to manufacturer/supplier for information on recovery/recycling.

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