BISPHENOL DETECTION

BPA, BPE, BADGE, BEFDGE, NOGE

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DETERMINATION OF BISPHENOL A

Detection of trace amount of BPA has been detected frequently in water and food products kept in polycarbonate plastics. These Polycarbonate plastics are used because of their characterized strengths, stability, elasticity and low-density properties. Since, BPA and its derivatives including BPE, BADGE, BEFDGE and NOGE are harmful to living organisms, their presence and concentration in various food products must be monitored and reported to the food regulatory agencies on regular basis.

DETECTION TECHNIQUES

There have been several methods available for determination of BPA in various food products. Some of them have been listed below:

Using a Packed Needle Extraction Device

In this method, a fiber packed needle extraction device was used for the extraction of BPA from water, wherein a bundle of filaments having a coating of PDMS was packed into the needle and when the water sample was pumped through the syringe pump, it showed a higher extraction efficacy than the other conventional methods.

Read more

Micellar Liquid Chromatography

This method is based on the preliminary extraction and concentration of BPA and its derivative by solid – phase extraction (SPE) and then determination by Micellar liquid chromatography (MLC) followed by UV detection. This sensitive method is rapid and is characterized by high recovery for BPA and its derivatives. The reason for combining SPE and MLC is to enable the determination of BPA at ppb levels.

Read more

Gas chromatography-mass spectrometry

The volatility and thermal stability depicted by BPA makes it suitable for detection by GC. The sample treatment is simple liquid- liquid extraction using 50 ml dichloromethane and 1000ml of water sample. The recoveries were good in this method.

Read more

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BISPHENOL DETECTION

BPA, BPE, BADGE, BEFDGE, NOGE

FOOD SAFETY & REGULATIONS

Food safety continues to be a major focus of food analysis and research. Many analytical labs are now investigating a wide array of questions regarding authenticating the safety claims of the packaged foods. We are providing products which will help the analytical chemists to explore some current trends in food analysis and food authentication.

To serve all the research needs of food analysts, we proudly offer high-quality analytical standards and related chemicals for distinctive application areas and market segments ranging from food industry & environmental analysis, to those used in the cosmetic, pharmaceuticals and drug trials.

PRODUCT REVIEWS

★★★★★

Very high quality product for HPLC analysis!!

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★★★★★

You supply more compounds of relevance to my research than any other vendors.

Laurentian University, Canada

★★★★★

We never had Problems with reference materials from TRC

University of Heidelberg, Germany

Micro Liquid-Liquid Extraction

The use of chemical derivatives to improve analysis has been a common practice in the GC-MS analysis along with the silylation reaction. In this reaction, active hydrogen of the analyte is replaced by an alkysilyl group. This particular method of BPA detection revels the formation of trimethylsilyl derivatives using trimethylchlorosilane and hexa-methyl-disilazane as reagents following micro liquid- liquid extraction with dichloromethane and GC-MS analysis.

Read more

Isotope dilution headspace solid-phase micro extraction

The SPME fibers uses an epoxy resin adhesive that releases BPA, which adversely affects the method detection limit and accuracy. This particular method compares the 5 new metal alloy SPME fibers which are not using epoxy resins for the extraction of BPA in water.

Read more

Using dispersive liquid-phase micro extraction

This method describes the determination of BPA by dispersive liquid Phase microextraction with acetylation prior to GC-MS with good reproducibility for the analysis of drinking water sample.

Read more

Using New SPE Sorbents With Chemically Bonded Ketoimine Groups

The proposed method includes the isolation and chromatographic detection of BPA with preconcentration of water samples using SPE followed by drying the sorbent with air stream, eluting the analyte and GC analysis. The results showed a high recovery rate and have better output as compare to conventional GCMS methods.

Read more

Multi walled carbon nanotubes

This method was developed for the determination of BPA on carboxylated multi-walled carbon nanotubes modified electrode with high sensitivity and trace determination of BPA and its metabolites.

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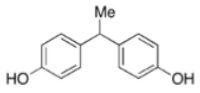
SELECTION OF RELATED COMPOUNDS FROM TRC

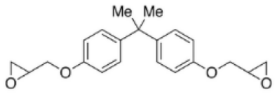


Catalogue No: B519480

Chemical Name: Bisphenol E

CAS number: 2081-08-5

Mol. Formula: $C_{14}H_{14}O_2$

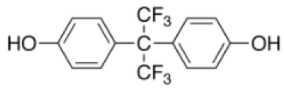


Catalogue No: B519500

Chemical Name: Bisphenol A Diglycidyl Ether

CAS number: 1675-54-3

Mol. Formula: $C_{21}H_{24}O_4$

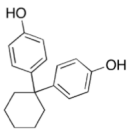


Catalogue No: B447290

Chemical Name: 2,2-Bis-(4-hydroxyphenyl)hexafluoropropane

CAS number: 1478-61-1

Mol. Formula: $C_{15}H_{10}F_6O_2$

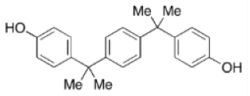


Catalogue No: B519650

Chemical Name: Bisphenol Z

CAS number: 843-55-0

Mol. Formula: $C_{18}H_{20}O_2$

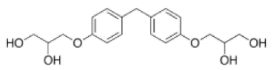


Catalogue No: B519475

Chemical Name: Bisphenol P

CAS number: 2167-51-3

Mol. Formula: $C_{24}H_{26}O_2$

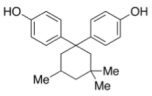


Catalogue No: B519550

Chemical Name: Bisphenol F Bis(2,3-dihydroxypropyl) Ether

CAS number: 72406-26-9

Mol. Formula: $C_{19}H_{24}O_6$

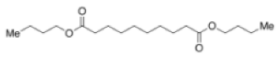


Catalogue No: B519570

Chemical Name: Bisphenol TMC

CAS number: 129188-99-4

Mol. Formula: $C_{21}H_{26}O_2$

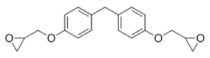


Catalogue No: D429525

Chemical Name: Dibutyl Sebacate

CAS number: 109-43-3

Mol. Formula: $C_{18}H_{34}O_4$

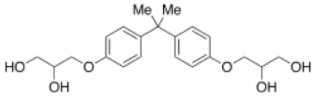


Catalogue No: B519540

Chemical Name: Bisphenol F Diglycidyl Ether Diastereomers)

CAS number: 2095-03-6

Mol. Formula: $C_{19}H_{20}O_4$

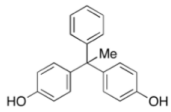


Catalogue No: B519525

Chemical Name: Bisphenol A Bis(2,3-dihydroxypropyl) Ether(Mixture of Diastereomers)

CAS number: 5581-32-8

Mol. Formula: $C_{21}H_{28}O_6$

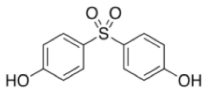


Catalogue No: B519485

Chemical Name: Bisphenol AP

CAS number: 1571-75-1

Mol. Formula: $C_{20}H_{18}O_2$

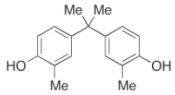


Catalogue No: B447390

Chemical Name: Bis(4-hydroxyphenyl) Sulfone

CAS number: 80-09-1

Mol. Formula: $C_{12}H_{10}O_4S$

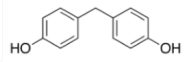


Catalogue No: B519600

Chemical Name: Bisphenol C

CAS number: 79-97-0

Mol. Formula: $C_{17}H_{20}O_2$

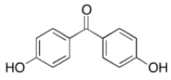


Catalogue No: B519555

Chemical Name: Bisphenol F

CAS number: 620-92-8

Mol. Formula: $C_{13}H_{12}O_2$



Catalogue No: B443800

Chemical Name: Bis(4-hydroxy)benzophenone

CAS number: 611-99-4

Mol. Formula: $C_{13}H_{10}O_3$

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PMID: 26138904	PMID: 24315674	PMID: 24835763
PMID: 23055538	PMID: 25679329	PMID: 26138904
PMID: 24411090	PMID: 24980807	PMID: 27434659

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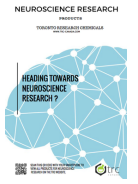

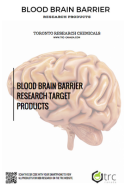

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