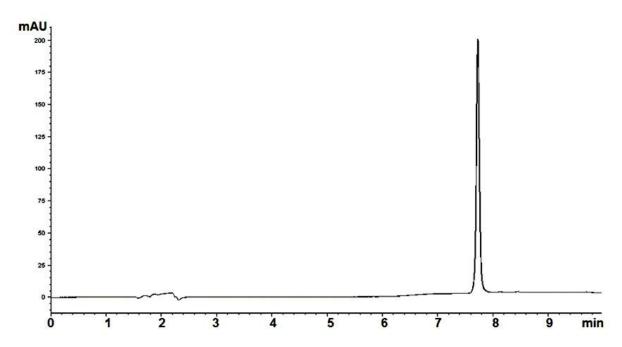


Bisphenol A, BPA Analyzed with HPLC - AppNote

Toxic Substance Found in Consumer Products Analyzed by HPLC

Bisphenol A (BPA) is a challenging compound for analysis by HPLC. Monitoring of this environmental and health toxicant is a necessary process for surveillance as well as risk assessment.

As shown in the 5 Chromatograms overlaid below, this Method produces Peak Shapes that are Symmetrical and with high Efficiency. The Repeatability of the Analysis is also remarkable as can be seen in the Figure. In addition, the Method Equilibrates rapidly with only 1 minute post time after the Gradient.



Above Chromatogram has 5 separate runs overlaid to show repeatability.

Peak:

Bisphenol A

Method Conditions

Column: Cogent Bidentate C8[™], 4μm, 100Å

Catalog No.: 40008-75P **Dimensions**: 4.6 x 75mm

Mobile Phase:

A: DI Water / 0.1% Formic Acid B: Acetonitrile / 0.1% Formic Acid



Gradient:

| Time (minutes) | %B |
|----------------|----|
| 0 | 30 |
| 2 | 30 |
| 6 | 90 |
| 8 | 90 |
| 9 | 30 |

Injection vol.: 5µL

Flow rate: 0.5mL / minute **Detection**: UV @ 275nm

to: 0.9 minutes

Note: BPA is a synthetic compound widely used in industry as an epoxy resin, a polycarbonate, and an antioxidant in Polyvinyl Chloride (PVC) plastics. Epoxy resins are used as inner surface coatings for food and beverage cans. Polycarbonates are used in fabrication of plastic food containers (even infant feeding bottles). PVC is in a variety of products which come in contact with food. Even at low concentrations, chronic exposure to BPA is of toxicological concern. It has Estrogen like effects and causes a variety of adverse symptoms (e.g. genital malformations, testicular abnormalities, impairment in fertility or sexual functions).



Attachment

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