



Sensitive, Precise Quantitative Determination of Bisphenol A

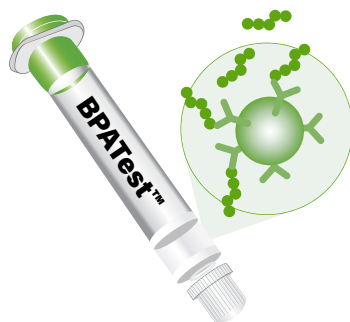
Bisphenol A (BPA) is a chemical of concern found in polycarbonate consumer products such as plastic food and beverage containers, as well as in a wide variety of epoxy resin applications, including the inner coatings of cans, jar caps, and water pipes; dental materials; and thermal paper. BPA safety studies have linked this known endocrine disruptor to numerous adverse health effects, ranging from diabetes, heart disease, and reproductive and developmental problems to breast and prostate cancers.

BPA regulations continue to evolve in response to mounting scientific and consumer concern about its potential impact on public health and the environment. The use of BPA in baby bottles, sippy cups, and infant formula packaging is illegal in the U.S., Canada, the EU, and several Asian countries. California's Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65) lists BPA as a reproductive toxicant, setting a MADL of 3 µg/day for dermal exposure, as well as 0.1 ppb in infant formula, baby food, liquid, FCM bottles and cups for children age 3 and younger. In addition to the EU's 0.05 mg/kg of body weight daily maximum migration level in plastic food contact materials, BPA regulations for various other products are in force in a number of U.S. states and European countries.

VICAM's BPATest™ pairs immunoaffinity chromatography with liquid chromatography (HPLC, UPLC) combined with Fluorescence or mass spectrometry detectors to accurately, precisely, and reliably detect and measure sub-ppb levels of BPA in complex matrices. As a quantitative method that outperforms solid phase extraction (SPE) and "dilute-and-shoot" techniques in both sensitivity and specificity, BPATest offers a forward-looking solution to emerging compliance and market demands. The proprietary monoclonal antibody in VICAM's immunoaffinity columns efficiently transforms test samples into highly concentrated, ultra-clean BPA extract.

HERE'S HOW SIMPLE VICAM TESTS ARE TO USE:

- Sample preparation: May involve extraction, filtration, dilution, pH adjustment depending on the types of sample
- Column preparation
- Capture BPA by affinity column
- Wash column with H₂O
- Elute column and collect in a cuvette
- Dry elute or direct inject to LC or LC-MS



BENEFITS

Fit for Purpose – Specifically designed for HPLC, UPLC,™ and LC-MS use

Wide range – Detects levels as low as 0.1 ppb and as high as 50 ppb

Versatile – Works with a variety of samples

Powerful – Simultaneous isolation and purification of target analyte

Safe – Minimizes the use of organic solvents



ORDERING INFORMATION

Cat. No.	Description
176004211	BPATest Columns (25/box)
G1113	Phosphate buffer, 10x (150 mL)
36022	Filter funnel, 105 mm
31240	Fluted filters
34000	Disposable cuvettes (250/box)
23040	Vortex mixer
21020	Single position pump stand
35016	Methanol, HPLC grade (4 x 4 L)

Other required materials listed below:

Acetic acid, HPLC grade
Adjustable pipettors, 1 mL, 100 µL
Distilled or deionized water

Optional items listed below:

Vacuum manifold
Waters CORTECS™ UPLC C₁₈+, 2.1 x 100 mm, 1.6 µm

Subject to change without notice.

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Orders:

1848 N Deffer Drive
Nixa, MO 65714 USA

Tel: +1.877.228.4244
+1.417.725.6588

Fax: +1.417.725.6102
orders@vicam.com

Headquarters:

34 Maple Street
Milford, MA 01757 USA

Tel: +1.800.338.4381
+1.508.482.4935

Fax: +1.508.482.4972
www.vicam.com