New Product from Wellington Laboratories

New Degradation Product of HBCD Pentabromocyclododecene

The widespread use of hexabromocyclododecane (HBCD) as an additive flame retardant for polystyrene foams and textiles has resulted in its detection in a variety of matrices.

Unfortunately the environmental impact of HBCD extends much further. HBCD has been shown to form decomposition products and metabolites through multiple transformation pathways such as debromination, dehydrobromination and hydroxylation. As a result, the detection of HBCD related compounds, such as diastereomers of pentabromocyclododecene (PBCD), in environmental samples is on the rise. To date, PBCD has been detected in dust, egss, fish and sediments. Depending on the matrix and source, elevated levels of PBCD may be the result of bioaccumulation, due to its presence as a trace impurity in technical HBCD, or metabolism.

The main diastereomer formed from the decomposition of gamma HBCD is *rac*-(1,5R,6S,9S,10R) – pentabromocyclododecene. In order to aid researchers in the detection and identification of pentabromocyclododecene (PBCD) in environmental samples, Wellington Laboratories now offers a reference standard of this single PBCD diastereomer.



Pentabromocyclododecene (PBCD)

Catalogue Number: PBCD

Product (toluene): rac-(1,5R,6S,9S,10R) – pentabromocyclododecene.

Quantity: 1.2mL

Concentration: 50 µ/ml

Reference Standards from Wellington Laboratories are distributed throughout Europe and the Middle East by:

Greyhound Chromatography and Allied Chemicals 6 Kelvin Park, Birkenhead Merseyside, CH41 1LT Tel: +44 (0) 151 649 4000 Fax: +44 (0) 151 649 4001 Email: info@greyhoundchrom.com http://www.greyhoundchrom.com



