WELLINGTON Reporter
PRODUCT UPDATES FROM WELLINGTON LABORATORIES

July 21, 2010

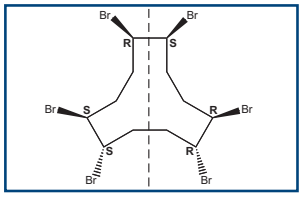
NEW PRODUCTS

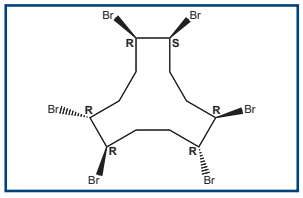
Zeta (ζ), Eta (η), Theta (θ), Iota (ι), and Kappa (κ) Hexabromocyclododecane Isomers

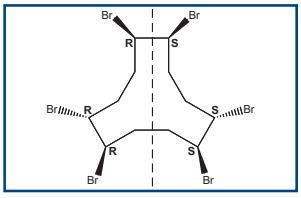
The increased global production and use of brominated flame retardants (BFRs) has prompted many researchers to include the minor components of common technical mixtures in their analyses. This is very important since, in certain cases, it may be these minor components that pose the greatest threat to human health.

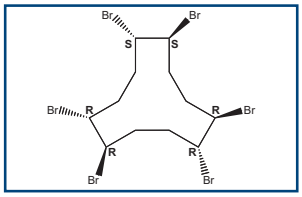
Hexabromocyclododecane (HBCD) is a widely used brominated flame retardant (BFR) that is primarily utilized as an additive in textiles and extruded polystyrene foams. Commercial HBCD is a mixture consisting mainly of three diastereomeric pairs of enantiomers; alpha(α)-, beta(β)- and gamma(γ)-HBCD, however 10 possible structural isomers exist. **Wellington** currently offers 5 individual standards of the HBCD isomers, specifically alpha(α)-, beta(β)-, gamma(γ)-, delta(δ)-, and epsilon(ε)-HBCD.

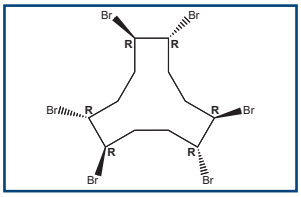
In order to aid researchers in the identification and quantification of HBCD in environmental samples, **Wellington** has recently completed the synthesis of the remaining 5 native diastereomers, zeta(ζ)-, eta(η)-, theta(θ)-, iota(ι)-, and kappa(κ)-HBCD, and is offering them as individual reference standard solutions in toluene.


zHBCD


etaHBCD


tHBCD


iHBCD


kHBCD

Catalogue Number	Product (toluene solution)	Qty/Conc
zHBCD	zeta(ζ)-1,2,5,6,9,10-Hexabromocyclododecane	1.2 ml 50 µg/ml
etaHBCD	eta(η)-1,2,5,6,9,10-Hexabromocyclododecane	1.2 ml 50 µg/ml
tHBCD	theta(θ)-1,2,5,6,9,10-Hexabromocyclododecane	1.2 ml 50 µg/ml
iHBCD	iota(ι)-1,2,5,6,9,10-Hexabromocyclododecane	1.2 ml 50 µg/ml
kHBCD	kappa(κ)-1,2,5,6,9,10-Hexabromocyclododecane	1.2 ml 50 µg/ml

ISO 9001 Certified System CERT-0025901

NOTE: Zeta- and theta-HBCD are meso compounds and only one enantiomer is shown for the other three isomers.

INDIVIDUAL NATIVE HEXABROMOCYCLODODECANE ISOMERS

Catalogue Number	Product (toluene solution)	Qty/Conc	
aHBCD	α-1,2,5,6,9,10-Hexabromocyclododecane	1.2 ml	50 µg/ml
bHBCD	β-1,2,5,6,9,10-Hexabromocyclododecane	1.2 ml	50 µg/ml
gHBCD	γ-1,2,5,6,9,10-Hexabromocyclododecane	1.2 ml	50 µg/ml
dHBCD	δ-1,2,5,6,9,10-Hexabromocyclododecane	1.2 ml	50 µg/ml
eHBCD	ε-1,2,5,6,9,10-Hexabromocyclododecane	1.2 ml	50 µg/ml

^{13}C-LABELLED HEXABROMOCYCLODODECANE ISOMERS

Catalogue Number	Product (toluene solution)	Qty/Conc	
MaHBCD	α-1,2,5,6,9,10-Hexabromo[$^{13}C_{12}$]cyclododecane	1.2 ml	50 µg/ml
MbHBCD	β-1,2,5,6,9,10-Hexabromo[$^{13}C_{12}$]cyclododecane	1.2 ml	50 µg/ml
MgHBCD	γ-1,2,5,6,9,10-Hexabromo[$^{13}C_{12}$]cyclododecane	1.2 ml	50 µg/ml

DEUTERATED HEXABROMOCYCLODODECANE ISOMERS

Catalogue Number	Product (toluene solution)	Qty/Conc	
DaHBCD	d18-α-1,2,5,6,9,10-Hexabromocyclododecane	1.2 ml	50 µg/ml
DbHBCD	d18-β-1,2,5,6,9,10-Hexabromocyclododecane	1.2 ml	50 µg/ml
DgHBCD	d18-γ-1,2,5,6,9,10-Hexabromocyclododecane	1.2 ml	50 µg/ml

Please contact your local distributor or info@well-labs.com for pricing and delivery.

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