



November 28 2006

MASS-LABELLED POLYBROMINATED BIPHENYL SOLUTION/MIXTURE

On July 1st of this year, Directive 2002/95/EC of the European Parliament and the Council of the European Union concerning the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment (RoHS) became enforceable. The RoHS Regulations ban the placing of new Electrical and Electronic Equipment (EEE) into the European Union marketplace which contain more than established levels of certain hazardous substances.

Polybrominated Biphenyls (PBBs), a class of Brominated Flame Retardants, are among the compounds covered by these regulations. PBBs have a maximum allowable limit of 0.1% by weight in homogeneous materials permitted in the manufacture of new EEE.

WELLINGTON recently introduced to the market several native and mass-labelled PBB congeners, as well as, a solution/mixture of native PBB congeners (**PBB-MXA**). In response to customer enquiries, Wellington has now prepared a solution/mixture of our available mass-labelled PBB congeners. The components and concentrations of **MBB-MXA** can be seen below.

MASS-LABELLED BROMINATED BIPHENYLS: SOLUTION/MIXTURE

Catalogue Number	Product (nonane solution)	Qty/Conc
MBB-MXA	Mass-Labelled PBB Solution/Mixture	1.2 ml
	IUPAC	
	2,2',5,5'-Tetrabromo[¹³ C ₁₂]biphenyl	52L
	2,2',4,4',5,5'-Hexabromo[¹³ C ₁₂]biphenyl	153L
	2,2',3,3',4,4',5,5'-Octabromo[¹³ C ₁₂]biphenyl	194L
	Decabromo[¹³ C ₁₂]biphenyl	209L
		1 µg/ml
		2 µg/ml
		2 µg/ml
		5 µg/ml

A complete listing of our PBB product line is also attached.
Please contact your local distributor or info@well-labs.com for pricing and delivery.

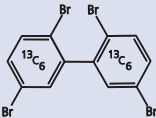
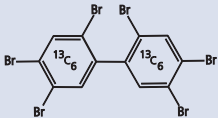
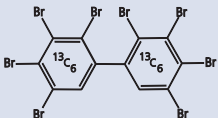
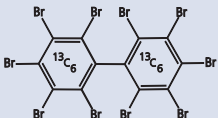
AND...Please continue to visit our website (www.well-labs.com) for a complete listing of new product releases.

NATIVE BROMINATED BIPHENYLS (PBBs)

Catalogue Number	Product (nonane solution)	Qty/Conc
BB-1	2-Bromobiphenyl	1.2 ml 50 µg/ml
BB-2	3-Bromobiphenyl	1.2 ml 50 µg/ml
BB-3	4-Bromobiphenyl	1.2 ml 50 µg/ml
BB-4	2,2'-Dibromobiphenyl	1.2 ml 50 µg/ml
BB-7	2,4-Dibromobiphenyl	1.2 ml 50 µg/ml
BB-9	2,5-Dibromobiphenyl	1.2 ml 50 µg/ml
BB-10	2,6-Dibromobiphenyl	1.2 ml 50 µg/ml
BB-15	4,4'-Dibromobiphenyl	1.2 ml 50 µg/ml
BB-18	2,2',5-Tribromobiphenyl	1.2 ml 50 µg/ml
BB-22	2,3,4'-Tribromobiphenyl	1.2 ml 50 µg/ml
BB-26	2,3',5-Tribromobiphenyl	1.2 ml 50 µg/ml
BB-29	2,4,5-Tribromobiphenyl	1.2 ml 50 µg/ml
BB-30	2,4,6-Tribromobiphenyl	1.2 ml 50 µg/ml
BB-31	2,4',5-Tribromobiphenyl	1.2 ml 50 µg/ml
BB-37	3,4,4'-Tribromobiphenyl	1.2 ml 50 µg/ml
BB-38	3,4,5-Tribromobiphenyl	1.2 ml 50 µg/ml
BB-49	2,2',4,5'-Tetrabromobiphenyl	1.2 ml 50 µg/ml
BB-52	2,2',5,5'-Tetrabromobiphenyl	1.2 ml 50 µg/ml
BB-53	2,2',5,6'-Tetrabromobiphenyl	1.2 ml 50 µg/ml
BB-56	2,3,3',4'-Tetrabromobiphenyl	1.2 ml 50 µg/ml
BB-75	2,4,4',6-Tetrabromobiphenyl	1.2 ml 50 µg/ml
BB-77	3,3',4,4'-Tetrabromobiphenyl	1.2 ml 50 µg/ml
BB-80	3,3',5,5'-Tetrabromobiphenyl	1.2 ml 50 µg/ml
BB-101	2,2',4,5,5'-Pentabromobiphenyl	1.2 ml 50 µg/ml
BB-103	2,2',4,5',6-Pentabromobiphenyl	1.2 ml 50 µg/ml
BB-153	2,2',4,4',5,5'-Hexabromobiphenyl	1.2 ml 50 µg/ml
BB-154	2,2',4,4',5,6'-Hexabromobiphenyl	1.2 ml 50 µg/ml
BB-155	2,2',4,4',6,6'-Hexabromobiphenyl	1.2 ml 50 µg/ml
BB-156	2,3,3',4,4',5-Hexabromobiphenyl	1.2 ml 50 µg/ml
BB-169	3,3',4,4',5,5'-Hexabromobiphenyl	1.2 ml 50 µg/ml
BB-180	2,2',3,4,4',5,5'-Heptabromobiphenyl	1.2 ml 50 µg/ml
BB-189	2,3,3',4,4',5,5'-Heptabromobiphenyl	1.2 ml 50 µg/ml
BB-194	2,2',3,3',4,4',5,5'-Octabromobiphenyl	1.2 ml 50 µg/ml
BB-205	2,3,3',4,4',5,5',6-Octabromobiphenyl	1.2 ml 50 µg/ml
BB-206	2,2',3,3',4,4',5,5',6-Nonabromobiphenyl	1.2 ml 50 µg/ml
BB-209	Decabromobiphenyl	1.2 ml 50 µg/ml



MASS-LABELLED BROMINATED BIPHENYLS

Catalogue Number	Product
MBB-52	 <p>2,2',5,5'-Tetrabromo[¹³C₁₂]biphenyl 1.2 ml; 50 µg/ml (±2.5 µg/ml); in nonane; Isotopic purity; 99% or greater</p>
MBB-153	 <p>2,2',4,4',5,5'-Hexabromo[¹³C₁₂]biphenyl 1.2 ml; 50 µg/ml (±2.5 µg/ml); in nonane; Isotopic purity; 99% or greater</p>
MBB-194	 <p>2,2',3,3',4,4',5,5'-Octabromo[¹³C₁₂]biphenyl 1.2 ml; 50 µg/ml (±2.5 µg/ml); in nonane; Isotopic purity; 99% or greater</p>
MBB-209	 <p>Decabromo[¹³C₁₂]biphenyl 1.2 ml; 50 µg/ml (±2.5 µg/ml); in nonane; Isotopic purity; 99% or greater</p>

NATIVE BROMINATED BIPHENYLS: SOLUTION/MIXTURE

Catalogue Number	Product (nonane solution)	Qty/Conc
PBB-MXA	Native PBB Solution/Mixture	1.2 ml
	IUPAC	
	4-Bromobiphenyl	3
	4,4'-Dibromobiphenyl	15
	2,2',5-Tribromobiphenyl	18
	2,2',5,5'-Tetrabromobiphenyl	52
	2,2',4,5,5'-Pentabromobiphenyl	101
	2,2',4,4',5,5'-Hexabromobiphenyl	153
	2,2',3,4,4',5,5'-Heptabromobiphenyl	180
	2,2',3,3',4,4',5,5'-Octabromobiphenyl	194
	2,2',3,3',4,4',5,5',6-Nonabromobiphenyl	206
	Decabromobiphenyl	209
		5 µg/ml

POLYBROMINATED BIPHENYL TECHNICAL MIXTURES: SOLUTIONS

Catalogue Number	Product (nonane solution)	Qty/Conc
TBB-BP6	Great Lakes Chemical Firemaster BP-6™ Hexabromobiphenyl	1.2 ml 100 µg/ml
TBB-809D	Chemische Fabrik Kalk Bromkal80-9D™ Nonabromobiphenyl	1.2 ml 100 µg/ml

