



Polybrominated Biphenyl Standards (PBBs)



Polybrominated biphenyls (PBB's) which may also be called brominated biphenyls, or polybromobiphenyls, are the bromine analogs of Polychlorinated biphenyls (PCB's). Like PCB's, they are man made, hazardous to mammalian health, controlled, or prescribed environmentally but not nearly as commonly used as PCB's in industrial applications.

Like PCB's there are 209 possible congeners which differ from each other in the number and position of the bromine atoms in the two phenyl rings. Also like the PCB's the benzene rings can rotate around the central bond that connects the rings allowing planar and non-planar configurations. These differences in molecular structure are highly relevant in terms of the interaction with different receptors in determining possible toxicological or pathological properties of PBB's.

The products are used as flame retardants and form a subset of the brominated flame retardant group. The products are added to polymers and fibres and have made their way into several types of consumer goods, including computer peripherals, electrical goods, textiles and some furniture products, always to render them, less flammable. PBB's are also highly lipophilic and will accumulate in lipid rich tissues. There is significant evidence of hazards to human health from these products which are certainly proven to be absorbed through the gastrointestinal tract. Such pathological effects include evidence of poor neurodevelopment, specific cancers, and hormonal effects on fertility. Some evidence of immunotoxicity has also been reported.

Reagecon is developing a growing offering of PBB congeners mostly in ready to use format in an isooctane matrix. However, customised matrices, mixtures and other concentrations are also available upon request. Some of the congeners are also offered in neat form. For additional information on this rapidly growing range please visit www.reagecon.com

Native PBBs (polybromobiphenyls)

Product No.	Description	Concentration	Pack Size
REPBB001	2-Bromobiphenyl (PBB-1)	50µg/mL in isooctane	1ml
REPBB002	3-Bromobiphenyl (PBB-2)	50µg/mL in isooctane	1ml
REPBB003	4-Bromobiphenyl (PBB-3)	50µg/mL in isooctane	1ml
REPBB004	2,2'-Dibromobiphenyl (PBB-4)	50µg/mL in isooctane	1ml
REPBB007	2,4-Dibromobiphenyl (PBB-7)	50µg/mL in isooctane	1ml
REPBB009	2,5-Dibromobiphenyl (PBB-9)	50µg/mL in isooctane	1ml
REPBB010	2,6-Dibromobiphenyl (PBB-10)	50µg/mL in isooctane	1ml
REPBB015	4,4'-Dibromobiphenyl (PBB-15)	50µg/mL in isooctane	1ml
REPBB018	2,2',5-Tribromobiphenyl (PBB-18)	50µg/mL in isooctane	1ml
REPBB026	2,3',5-Tribromobiphenyl (PBB-26)	50µg/mL in isooctane	1ml
REPBB029	2,4,5-Tribromobiphenyl (PBB-29)	50µg/mL in isooctane	1ml
REPBB031	2,4',5-Tribromobiphenyl (PBB-31)	50µg/mL in isooctane	1ml
REPBB038	3,4,5-Tribromobiphenyl (PBB-38)	50µg/mL in isooctane	1ml
REPBB049	2,2',4,5'-Tetrabromobiphenyl (PBB-49)	50µg/mL in isooctane	1ml
REPBB052	2,2',5,5'-Tetrabromobiphenyl (PBB-52)	50µg/mL in isooctane	1ml
REPBB056	2,2',5,6'-Tetrabromobiphenyl (PBB-56)	50µg/mL in isooctane	1ml
REPBB077	3,3',4,4'-Tetrabromobiphenyl (PBB-77)	50µg/mL in isooctane	1ml
REPBB080	3,3',5,5'-Tetrabromobiphenyl (PBB-80)	50µg/mL in isooctane	1ml
REPBB103	2,2',4,5',6-Pentabromobiphenyl (PBB-103)	50µg/mL in isooctane	1ml
REPBB126	3,3',4,5,5'-Pentabromobiphenyl (PBB-126)	50µg/mL in isooctane	1ml
REPBB153	2,2',4,4',5,5'-Hexabromobiphenyl (PBB-153)	50µg/mL in hexane	1ml
REPBB155	2,2',4,4',6,6'-Hexabromobiphenyl (PBB-155)	50µg/mL in isooctane	1ml
REPBB169	3,3',4,4',5,5'-Hexabromobiphenyl (PBB-169)	10µg/mL in cyclohexane	1ml
REPBB189	2,3,3',4,4',5,5'-Heptabromobiphenyl (PBB-189)	50µg/mL in isooctane	1ml
REPBB194	2,2',3,3',4,4',5,5'-Octabromobiphenyl (PBB-194)	50µg/mL in isooctane	1ml
REPBB203	2,2',3,4,4',5,5',6-Octabromobiphenyl (PBB-203)	50µg/mL in isooctane	1ml
REPBB205	2,3,3',4,4',5,5',6-Octabromobiphenyl (PBB-205)	50µg/mL in isooctane	1ml
REPBB206	2,2',3,3',4,4',5,5',6-Nonabromobiphenyl (PBB-206)	50µg/mL in isooctane	1ml
REPBB209	Decabromobiphenyl (PBB-209)	50µg/mL in isooctane	1ml
REPBB209N	Decabromobiphenyl (PBB-209)	Neat	5mg