

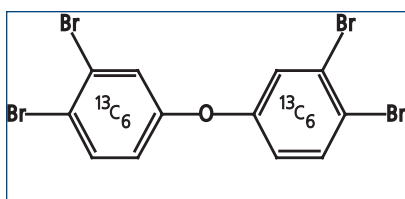


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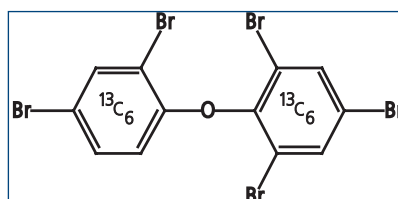
## **PBDE UPDATE**

### **NEW NATIVE AND MASS-LABELLED POLYBROMINATED DIPHENYL ETHERS (PBDEs)**

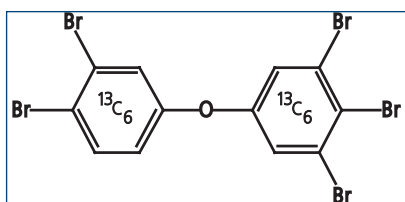
In order to provide researchers with an expanded selection of surrogates for use in the analysis of PBDEs, **WELLINGTON** has recently completed the synthesis of the following compounds.



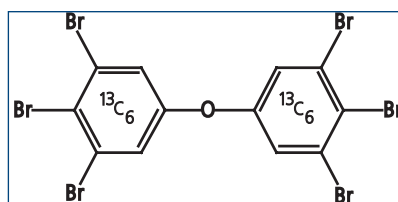
**MBDE-77**



**MBDE-100**



**MBDE-126**



**MBDE-169**

Using bioassays, the PBDE isomers BDE-77, BDE-126 and BDE-169 have been found to have some "*dioxin-like*" activity. Although they are not present in significant quantities in the commercial PBDE mixtures, they may be formed by photolysis of some of the major components. For example, BDE-153 would likely photolyze to yield BDE-77.

BDE-100 is a significant component (ca. 10%) of one of the commercial mixtures. Because of this, and client requests, its mass-labelled analogue, MBDE-100, was prepared.

*Additional native PBDE congeners have also been prepared and added to our product line.*

Our current offerings of mass-labelled and native PBDEs are attached. Please contact your local distributor or [info@well-labs.com](mailto:info@well-labs.com) for pricing and delivery.

**AND...Please continue to visit our website ([www.well-labs.com](http://www.well-labs.com)) for a complete listing of new product releases.**

## NATIVE BROMINATED DIPHENYL ETHERS (PBDEs)

	Catalogue Number	Product (nonane solution)	Qty/Conc	
<b>NEW</b>	<b>BDE-1</b>	2-Bromodiphenyl ether	1.2 ml	50 µg/ml
<b>NEW</b>	<b>BDE-2</b>	3-Bromodiphenyl ether	1.2 ml	50 µg/ml
	<b>BDE-3</b>	4-Bromodiphenyl ether	1.2 ml	50 µg/ml
	<b>BDE-7</b>	2,4-Dibromodiphenyl ether	1.2 ml	50 µg/ml
	<b>BDE-15</b>	4,4'-Dibromodiphenyl ether	1.2 ml	50 µg/ml
	<b>BDE-17</b>	2,2',4-Tribromodiphenyl ether	1.2 ml	50 µg/ml
	<b>BDE-28</b>	2,4,4'-Tribromodiphenyl ether	1.2 ml	50 µg/ml
	<b>BDE-47</b>	2,2',4,4'-Tetrabromodiphenyl ether	1.2 ml	50 µg/ml
	<b>BDE-49</b>	2,2',4,5'-Tetrabromodiphenyl ether	1.2 ml	50 µg/ml
<b>NEW</b>	<b>BDE-54</b>	2,2',6,6'-Tetrabromodiphenyl ether	1.2 ml	50 µg/ml
	<b>BDE-66</b>	2,3',4,4'-Tetrabromodiphenyl ether	1.2 ml	50 µg/ml
	<b>BDE-71</b>	2,3',4',6-Tetrabromodiphenyl ether	1.2 ml	50 µg/ml
	<b>BDE-77</b>	3,3',4,4'-Tetrabromodiphenyl ether	1.2 ml	50 µg/ml
	<b>BDE-85</b>	2,2',3,4,4'-Pentabromodiphenyl ether	1.2 ml	50 µg/ml
	<b>BDE-99</b>	2,2',4,4',5-Pentabromodiphenyl ether	1.2 ml	50 µg/ml
	<b>BDE-100</b>	2,2',4,4',6-Pentabromodiphenyl ether	1.2 ml	50 µg/ml
	<b>BDE-126</b>	3,3',4,4',5-Pentabromodiphenyl ether	1.2 ml	50 µg/ml
	<b>BDE-138</b>	2,2',3,4,4',5'-Hexabromodiphenyl ether	1.2 ml	50 µg/ml
	<b>BDE-153</b>	2,2',4,4',5,5'-Hexabromodiphenyl ether	1.2 ml	50 µg/ml
	<b>BDE-154</b>	2,2',4,4',5,6'-Hexabromodiphenyl ether	1.2 ml	50 µg/ml
	<b>BDE-156</b>	2,3,3',4,4',5-Hexabromodiphenyl ether	1.2 ml	50 µg/ml
<b>NEW</b>	<b>BDE-169</b>	3,3',4,4',5,5'-Hexabromodiphenyl ether	1.2 ml	50 µg/ml
	<b>BDE-183</b>	2,2',3,4,4',5',6-Heptabromodiphenyl ether	1.2 ml	50 µg/ml
	<b>BDE-184</b>	2,2',3,4,4',6,6'-Heptabromodiphenyl ether	1.2 ml	50 µg/ml
	<b>BDE-191*</b>	2,3,3',4,4',5',6-Heptabromodiphenyl ether	1.2 ml	50 µg/ml
	<b>BDE-196*</b>	2,2',3,3',4,4',5,6'-Octabromodiphenyl ether	1.2 ml	50 µg/ml
	<b>BDE-197*</b>	2,2',3,3',4,4',6,6'-Octabromodiphenyl ether	1.2 ml	50 µg/ml
	<b>BDE-206*</b>	2,2',3,3',4,4',5,5',6-Nonabromodiphenyl ether	1.2 ml	50 µg/ml
	<b>BDE-207*</b>	2,2',3,3',4,4',5,6,6'-Nonabromodiphenyl ether	1.2 ml	50 µg/ml
	<b>BDE-209*</b>	Decabromodiphenyl ether	1.2 ml	50 µg/ml

\* Toluene solution



## MASS-LABELLED BROMINATED DIPHENYL ETHERS

Catalogue Number	Product (nonane solution)	Qty/Conc	
<b>MBDE-3</b>	4-Bromo[ <sup>13</sup> C <sub>12</sub> ]diphenyl ether	1.2 ml	50 µg/ml
<b>MBDE-15</b>	4,4'-Dibromo[ <sup>13</sup> C <sub>12</sub> ]diphenyl ether	1.2 ml	50 µg/ml
<b>MBDE-28</b>	2,4,4'-Tribromo[ <sup>13</sup> C <sub>12</sub> ]diphenyl ether	1.2 ml	50 µg/ml
<b>MBDE-47</b>	2,2',4,4'-Tetrabromo[ <sup>13</sup> C <sub>12</sub> ]diphenyl ether	1.2 ml	50 µg/ml
<b>NEW</b> <b>MBDE-77</b>	3,3',4,4'-Tetrabromo[ <sup>13</sup> C <sub>12</sub> ]diphenyl ether	1.2 ml	50 µg/ml
<b>MBDE-99</b>	2,2',4,4',5-Pentabromo[ <sup>13</sup> C <sub>12</sub> ]diphenyl ether	1.2 ml	50 µg/ml
<b>NEW</b> <b>MBDE-100</b>	2,2',4,4',6-Pentabromo[ <sup>13</sup> C <sub>12</sub> ]diphenyl ether	1.2 ml	50 µg/ml
<b>NEW</b> <b>MBDE-126</b>	3,3',4,4',5-Pentabromo[ <sup>13</sup> C <sub>12</sub> ]diphenyl ether	1.2 ml	50 µg/ml
<b>MBDE-138</b>	2,2',3,4,4',5'-Hexabromo[ <sup>13</sup> C <sub>12</sub> ]diphenyl ether	1.2 ml	50 µg/ml
<b>MBDE-139</b>	2,2',3,4,4',6-Hexabromo[ <sup>13</sup> C <sub>12</sub> ]diphenyl ether	1.2 ml	50 µg/ml
<b>MBDE-153</b>	2,2',4,4',5,5'-Hexabromo[ <sup>13</sup> C <sub>12</sub> ]diphenyl ether	1.2 ml	50 µg/ml
<b>MBDE-154</b>	2,2',4,4',5,6'-Hexabromo[ <sup>13</sup> C <sub>12</sub> ]diphenyl ether	1.2 ml	50 µg/ml
<b>NEW</b> <b>MBDE-169</b>	3,3',4,4',5,5'-Hexabromo[ <sup>13</sup> C <sub>12</sub> ]diphenyl ether	1.2 ml	50 µg/ml
<b>MBDE-183</b>	2,2',3,4,4',5,6-Heptabromo[ <sup>13</sup> C <sub>12</sub> ]diphenyl ether	1.2 ml	50 µg/ml
<b>MBDE-197*</b>	2,2',3,3',4,4',6,6'-Octabromo[ <sup>13</sup> C <sub>12</sub> ]diphenyl ether	1.2 ml	50 µg/ml
<b>MBDE-207*</b>	2,2',3,3',4,4',5,6,6'-Nonabromo[ <sup>13</sup> C <sub>12</sub> ]diphenyl ether	1.2 ml	50 µg/ml
<b>MBDE-209*</b>	Decabromo[ <sup>13</sup> C <sub>12</sub> ]diphenyl ether	1.2 ml	25 µg/ml

\* Toluene solution

