

## Supporting Contents

**Table S1.** Internal and injection recovery standards in the current study

Congeners	Name	Additive ng
<i>Target BDEs</i>		
BDE #28 (3Br)	2,4,4'-Trichlorodiphenyl ether	0.5
BDE #47 (4Br)	2,2',4,4'-Tetralorodiphenyl ether	0.5
BDE #99 (5Br)	2,2',4,4',5-Pentalorodiphenyl ether	0.5
BDE #100 (5Br)	2,2',4,4',6-Pentalorodiphenyl ether	0.5
BDE #153 (6Br)	2,2',4,4',5,5'-Hexabromodiphenyl ether	1.0
BDE #154 (6Br)	2,2',4,4',5,6'-Hexabromodiphenyl ether	1.0
BDE #183 (7Br)	2,2',3,4,4',5',6-Heptabromodiphenyl ether	1.0
BDE #196 (8Br)	2,2',3,3',4,4',5,6'-Octabromodiphenyl ether	1.0
BDE #197 (8Br)	2,2',3,3',4,4',6,6'-Octabromodiphenyl ether	1.0
BDE #203 (8Br)	2,2',3,4,4',5,5',6-Octabromodiphenyl ether	1.0
BDE #206 (9Br)	2,2',3,3',4,4',5,5',6-Nonabromodiphenyl ether	2.5
BDE #207 (9Br)	2,2',3,3',4,4',5,6,6'-Nonabromodiphenyl ether	2.5
BDE #208 (9Br)	2,2',3,3',4,5,5',6,6'-Nonabromodiphenyl ether	2.5
BDE #209 (10Br)	Decabromodiphenyl ether	2.5
<i>Internal Standards</i>		
L-BDE #28 (3Br)	2,4,4'-Trichlorodiphenyl ether [ <sup>13</sup> C <sub>12</sub> ]	0.25
L-BDE #47 (4Br)	2,2',4,4'-Tetralorodiphenyl ether [ <sup>13</sup> C <sub>12</sub> ]	0.25
L-BDE #99 (5Br)	2,2',4,4',5-Pentalorodiphenyl ether [ <sup>13</sup> C <sub>12</sub> ]	0.25
L-BDE #153 (6Br)	2,2',4,4',5,5'-Hexabromodiphenyl ether [ <sup>13</sup> C <sub>12</sub> ]	0.50
L-BDE #154 (6Br)	2,2',4,4',5,6'-Hexabromodiphenyl ether [ <sup>13</sup> C <sub>12</sub> ]	0.50
L-BDE #183 (7Br)	2,2',3,4,4',5',6-Heptabromodiphenyl ether [ <sup>13</sup> C <sub>12</sub> ]	0.50
L-BDE #197 (8Br)	2,2',3,3',4,4',6,6'-Octabromodiphenyl ether [ <sup>13</sup> C <sub>12</sub> ]	0.50
L-BDE #207 (9Br)	2,2',3,3',4,4',5,6,6'-Nonabromodiphenyl ether [ <sup>13</sup> C <sub>12</sub> ]	1.25
L-BDE #209 (10Br)	Decabromodiphenyl ether [ <sup>13</sup> C <sub>12</sub> ]	1.25
<i>Recovery Standard</i>		
L-BDE#138 (6Br)	2,2',3,4,4',5'-Hexabromodiphenyl ether [ <sup>13</sup> C <sub>12</sub> ]	0.5

**Table S2.** PBDE concentrations in the stack flue gases

PBDEs	<b>D100</b>				<b>W40D60</b>				<b>W60D40</b>			
	S1	S2	S3	S4	S1	S2	S3	S4	S1	S2	S3	S4
BDE #28 (3Br)	0.0646	0.0112	0.0270	0.0196	0.0526	0.0145	0.0307	0.0127	0.0996	0.0411	0.0578	0.0730
BDE #47 (4Br)	0.380	0.0905	0.244	0.121	0.548	0.151	0.289	0.130	0.833	0.152	0.295	0.176
BDE #99 (5Br)	0.399	0.0888	0.184	0.0970	0.197	0.048	0.107	0.048	0.522	0.109	0.170	0.105
BDE #100 (5Br)	0.0272	0.0077	0.0158	0.00579	0.0453	0.0120	0.0241	0.0122	0.123	0.0261	0.0427	0.0259
BDE #153 (6Br)	0.0729	0.0168	0.0342	0.0135	0.0213	0.0056	0.0389	0.00506	0.0998	0.0193	0.0302	0.0182
BDE #154 (6Br)	0.00654	0.00177	0.00349	0.00177	0.00724	0.00506	0.0121	0.00172	0.0549	0.0112	0.0159	0.0101
BDE #183 (7Br)	0.0976	0.0248	0.0206	0.0104	0.0427	0.0113	0.162	0.0102	0.151	0.0261	0.0403	0.0290
BDE #196 (8Br)	0.322	0.063	0.071	0.0327	0.102	0.0225	0.0629	0.0225	0.296	0.0429	0.104	0.07125
BDE #197 (8Br)	0.189	0.041	0.060	0.0258	0.0769	0.0151	0.101	0.0159	0.106	0.0163	0.0245	0.0211
BDE #203 (8Br)	0.372	0.071	0.103	0.0279	0.0614	0.0135	0.0359	0.0159	0.141	0.0261	0.0386	0.0361
BDE #206 (9Br)	4.09	0.782	0.851	0.309	0.330	0.0359	0.0694	0.0919	1.58	0.206	0.351	0.278
BDE #207 (9Br)	2.96	0.600	0.911	0.239	0.520	0.0687	0.149	0.118	1.19	0.151	0.284	0.207
BDE #208 (9Br)	1.58	0.291	0.501	0.119	0.270	0.0365	0.0793	0.0664	0.476	0.0657	0.110	0.0895
BDE #209 (10Br)	43.6	7.34	4.28	2.00	23.5	1.88	2.80	4.48	33.6	3.75	5.65	6.24
$\sum$ tri-octa-BDEs	1.9	0.42	0.76	0.36	1.15	0.30	0.86	0.27	2.43	0.47	0.82	0.57
$\sum$ nona-deca-BDEs	52.3	9.01	6.55	2.67	24.66	2.03	3.10	4.76	36.89	4.17	6.39	6.81
<b>Total PBDEs ng/Nm<sup>3</sup></b>	<b>54.2</b>	<b>9.43</b>	<b>7.31</b>	<b>3.03</b>	<b>25.8</b>	<b>2.32</b>	<b>3.96</b>	<b>5.03</b>	<b>39.3</b>	<b>4.64</b>	<b>7.21</b>	<b>7.38</b>

Note: S1, S2, S3, and S4 stand for Sample 1, 2, 3, and 4.