



MS-7 Brominated Flame Retardants in Sediment

Year: 2024	Participants: 15 laboratories expected
Number of rounds: 2 per year	Start exercise: 1 April, 1 October
Number of materials: 2 per round	Sample size: 50 g

Participation form	Timetable	PT Scheme	Costs

This study covers the determination of brominated flame retardants (BFRs) in sediment.

Test Materials

The test materials cover a range of natural unspiked sediments from contaminated waters from the North Sea and/or Mediterranean. Sediments are dried and sieved to <0.5 mm before sub-sampling into glass jars for distribution. Sediment test materials have been shown to be stable over a number of years when stored at room temperature.

Determinands and concentration ranges

The BFRs to be determined are given in the table below. The table also shows:

- The expected concentration range for the determinands in the test materials.

- The constant and proportional error that will be used for assessment of the results.

Determinand	Unit	Concentration range	Error	
		Sediment	Const	Prop
BDE28	µg/kg	0.01-2	0.01	25.0%
BDE47	µg/kg	0.1-20	0.04	22.5%
BDE66	µg/kg	0.01-10	0.02	20.0%
BDE85	µg/kg	0.01-10		
BDE99	µg/kg	0.1-50	0.02	25.0%
BDE100	µg/kg	0.01-10	0.01	25.0%
BDE126	µg/kg			
BDE153	µg/kg	0.02-5	0.02	25.0%
BDE154	µg/kg	0.01-5	0.03	25.0%
BDE183	µg/kg	0.02-2	0.03	25.0%
BDE209	µg/kg	2-2000	1	25.0%
TBBP-A	µg/kg			
Dimethyl-TBBP-A	µg/kg			
α-HBCD	µg/kg			
β-HBCD	µg/kg			
γ-HBCD	µg/kg	0.01-20		
Total-HBCD	µg/kg	50-1000		

*Determinands which are not in bold are not in the scope of accreditation.