



QUASIMEME

Quality assurance of information
for marine environmental monitoring

Certificate of Analysis



Sediment

REFERENCE MATERIAL

Sediment sample 9



Certificate of Analysis Sediment 9

General Information

In this report an overview is given of analytical data for this sample collected in our proficiency testing program. The consensus values are calculated using a robust statistical model. With this NDA model mean and standard deviation are calculated using all reported data when at least 4 results are left after removal of reported 'lower than' (<) and 0 (= zero) values. No outliers are removed.

This report is divided into two sections: Consensus Values and Indicative Values. The division is made on the reliability of the data. Consensus Values are based on at least 10 results while the relative uncertainty is smaller than 6.25%. Indicative Values are based on a relative uncertainty of maximum 35% with at least 4 and less than 10 results or a relative uncertainty higher than 6.25%.

For each determinand the following parameters are given: mean, standard deviation, coefficient of variation, number of results, median, MAD (Median of Absolute Deviation) and the uncertainty in the assigned value. The confidence limits (at 95 % probability) are calculated for these determinands.

The results of each determinand is expressed on dried sediment.

Sample information

QUASIMEME reference materials cover a range of natural Marine sediment species from contaminated waters from the North Sea and/or Mediterranean. There is no spiking, mixing or other alterations of the samples. For sample preparation the sediment samples are dried at 40 oC and milled to pass a 0.5 mm sieve.

This Sediment sample 9 of harbor sediment from Dunmore East harbor, Ireland is prepared for the QUASIMEME proficiency programs. The results on which the values in this report are based were taken from the periods given in the following table.

Year.Round	Program	Sample Round Id
2019.2	MS8	QPF007MS
2016.1	MS6	QSP057MS
2014.2	MS6	QSP050MS
2014.1	MS6	QSP049MS



Indicative Values MS6

Method: Organometals - MS6

Element	Unit	Mean	Std.Dev.	CV %	N	Median	MAD	Uncertainty	95 % confidence limits		
Tributyltin (TBT)	µg Sn/kg	1380	689	49.9	61	1370	466	110	1204	-	1557
Dibutyltin (DBT)	µg Sn/kg	896	354.1	39.5	59	910	242.0	57.6	803	-	988
Monobutyltin (MBT)	µg Sn/kg	2590	1126	43.5	51	2680	755	197	2272	-	2905
Triphenyltin (TPhT)	µg Sn/kg	8.36	5.710	68.3	36	9.17	3.941	1.190	6.43	-	10.3
Diphenyltin (DPhT)	µg Sn/kg	4.89	2.713	55.4	16	5.97	1.960	0.848	3.46	-	6.33
Monophenyltin (MPhT)	µg Sn/kg	17.9	11.84	66.0	14	21.9	8.64	3.96	11.2	-	24.7



Indicative Values MS8

Method: Perfluorinated alkyl substances - MS8

Element	Unit	Mean	Std.Dev.	CV %	N	Median	MAD	Uncertainty	95 % confidence limits
n-PFOS	µg/kg	0.0700	0.0298	42.6	5	0.0740	0.0211	0.0167	0.0357 - 0.104
PFOA	µg/kg	0.0235	0.0013	5.7	4	0.0240	0.0010	0.0008	0.0217 - 0.0254