QUASIMEME

Quality assurance of information for marine environmental monitoring

Certificate of Analysis

Biota

REFERENCE MATERIAL

Biota sample 351

WAGENINGEN
UNIVERSITY & RESEARCH

Certificate of Analysis Biota 351

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 % probabilty) are calculated for these determinands.

The results of each determinand is expressed on a wet weight basis.

Sample information

QUASIMEME reference materials cover a range of natural Biota species from contaminated waters from the North Sea and/or Mediterranean. The supplied wet test materials are homogenised and sterilised by autoclaving.

This Biota sample 351 of Bream fillet from Hollands Diep, the Netherlands 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
2021.2	BT9	QBC070BT
2018.2	BT9	QBC057BT
2017.1	BT9	QBC051BT

Consensus Values BT9

Method: Brominated Flame Retardants - BT9

Element	Unit	Mean	Std.Dev.	CV %	N	Median	MAD	Uncertainty	95 % confidence limits
BDE28	µg/kg	0.216	0.0352	16.3	47	0.220	0.0250	0.0064	0.205 - 0.226
BDE47	µg/kg	12.3	1.76	14.3	52	12.2	1.19	0.30	11.8 - 12.7
BDE100	µg/kg	3.75	0.713	19.0	52	3.69	0.505	0.124	3.56 - 3.95
BDE153	µg/kg	0.576	0.1034	18.0	52	0.585	0.0690	0.0179	0.547 - 0.604
BDE154	µg/kg	0.968	0.1950	20.1	52	0.983	0.1280	0.0338	0.914 - 1.02

Indicative Values BT9

Method: Brominated Flame Retardants - BT9

Element	Unit	Mean	Std.Dev.	CV %	N	Median	MAD	Uncertainty	95 % confidence limits
BDE99	µg/kg	0.0196	0.0084	42.7	32	0.0205	0.0059	0.0018	0.0166 - 0.0226
a-HBCD	µg/kg	0.778	0.5241	67.4	7	0.721	0.3706	0.2476	0.309 - 1.25
Total HBCD	µg/kg	0.950	0.4879	51.3	9	0.900	0.3500	0.2033	0.582 - 1.32
Total lipid	(%)	4.18	0.434	10.4	7	4.20	0.300	0.205	3.80 - 4.57