QUASIMEME

Quality assurance of information for marine environmental monitoring

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Certificate of Analysis

Biota

REFERENCE MATERIAL

Biota sample 309

WAGENINGEN
UNIVERSITY & RESEARCH

Certificate of Analysis Biota 309

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 309 of Shrimp from Westerscheldt, 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
2015.2	BT9	QBC044BT

Indicative Values BT9

Method: Brominated Flame Retardants - BT9

Element	Unit	Mean	Std.Dev.	CV %	N	Median	MAD	Uncertainty	95 % confidence limits
BDE47	µg/kg	0.0512	0.0169	33.1	17	0.0507	0.0113	0.0051	0.0425 - 0.0598
BDE99	µg/kg	0.0211	0.0095	44.9	13	0.0202	0.0068	0.0033	0.0154 - 0.0268
BDE100	µg/kg	0.0125	0.0076	60.6	11	0.0130	0.0056	0.0029	0.0075 - 0.0176
BDE153	µg/kg	0.0068	0.0050	72.6	8	0.0097	0.0042	0.0022	0.0028 - 0.0109
BDE154	µg/kg	0.0065	0.0026	40.6	6	0.0070	0.0017	0.0013	0.0039 - 0.0092