QUASIMEME

Quality assurance of information for marine environmental monitoring

---

Certificate of Analysis

Biota

REFERENCE MATERIAL

Biota sample 313

WAGENINGEN
UNIVERSITY & RESEARCH

Certificate of Analysis Biota 313

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 313 of Roach from Merwede river, 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
2018.2	BT10	QPF013BT
2018.1	BT10	QPF009BT

Consensus Values BT10

Method: Perfluorinated alkyl substances - BT10

Element	Unit	Mean	Std.Dev.	CV %	N	Median	MAD	Uncertainty	95 % confidence limits
PFDA	µg/kg	0.370	0.0581	15.7	11	0.380	0.0402	0.0219	0.332 - 0.409

Indicative Values BT10

Method: Perfluorinated alkyl substances - BT10

Element	Unit	Mean	Std.Dev.	CV %	N	Median	MAD	Uncertainty	95 % confidence limits		
n-PFOS	µg/kg	4.06	1.030	25.4	11	4.11	0.760	0.388	3.37	-	4.74
total-PFOS	µg/kg	4.23	0.767	18.1	13	4.37	0.515	0.266	3.78	-	4.69
PFOSA	µg/kg	0.369	0.0978	26.5	6	0.378	0.0700	0.0499	0.271	-	0.467
PFUnDA	µg/kg	0.287	0.1491	52.0	10	0.312	0.1017	0.0589	0.181	-	0.392
PFDoA	µg/kg	0.277	0.0601	21.7	10	0.290	0.0410	0.0238	0.235	-	0.320
PFTeDA	µg/kg	0.285	0.1008	35.4	7	0.287	0.0623	0.0476	0.195	-	0.375