QUASIMEME

Quality assurance of information for marine environmental monitoring

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Certificate of Analysis

PSP shellfish toxins

REFERENCE MATERIAL

BT12 sample 7

WAGENINGEN
UNIVERSITY & RESEARCH

Certificate of Analysis BT12 7

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 Shellfish toxins species from contaminated waters from the North Sea and/or Mediterranean.

This BT12 sample 7 of Oyster tissue (Crassostrea gigas) from LRM12-06, Marine Institute, 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
2017.1	BT12	QST230BT
2015.1	BT12	QST191BT

Consensus Values BT12

Method: Toxins(SF) - BT12

Element	Unit	Mean	Std.Dev.	CV %	N	Median	MAD	Uncertainty	95 % confidence limits
GTX-1	µmol/kg	0.577	0.0567	9.8	21	0.582	0.0380	0.0155	0.552 - 0.603
GTX-2	µmol/kg	1.42	0.293	20.7	23	1.40	0.200	0.076	1.29 - 1.55
GTX-3	µmol/kg	0.481	0.0945	19.7	23	0.496	0.0655	0.0246	0.440 - 0.522
STX	µmol/kg	0.564	0.1085	19.2	53	0.578	0.0760	0.0186	0.534 - 0.594
Total toxicity	µgSTXdiHCleq./kg	875	178.1	20.3	61	873	118.5	28.5	830 - 921
GTX-2,3	µmol/kg	1.62	0.375	23.2	31	1.70	0.260	0.084	1.48 - 1.75

Indicative Values BT12

Method: Toxins(SF) - BT12

Element	Unit	Mean	Std.Dev.	CV %	N	Median	MAD	Uncertainty	95 % confidence limits
C1	µmol/kg	0.0547	0.0357	65.2	6	0.0670	0.0275	0.0182	0.0191 - 0.0904
dc-GTX2	µmol/kg	0.0150	0.0013	8.4	5	0.0150	0.0010	0.0007	0.0136 - 0.0164
GTX-4	µmol/kg	0.204	0.0744	36.5	21	0.215	0.0523	0.0203	0.170 - 0.238
GTX-5	µmol/kg	0.0112	0.0065	58.2	9	0.0100	0.0040	0.0027	0.0063 - 0.0162
NEO	µmol/kg	0.185	0.0740	40.0	32	0.208	0.0468	0.0164	0.159 - 0.212
GTX-1,4	µmol/kg	0.602	0.2525	42.0	24	0.632	0.1543	0.0644	0.495 - 0.708