QUASIMEME

Quality assurance of information for marine environmental monitoring

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Certificate of Analysis

PSP shellfish toxins

REFERENCE MATERIAL

BT12 sample 8

WAGENINGEN
UNIVERSITY & RESEARCH

Certificate of Analysis BT12 8

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 8 of Mussel tissue (Mytilus Edulis) from 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	QST231BT
2015.1	BT12	QST192BT

Consensus Values BT12

Method: Toxins(SF) - BT12

Element	Unit	Mean	Std.Dev.	CV %	N	Median	MAD	Uncertainty	95 % confidence limits
dc-STX	µmol/kg	0.565	0.1344	23.8	53	0.585	0.0940	0.0231	0.528 - 0.602
GTX-1	µmol/kg	0.429	0.0887	20.7	20	0.414	0.0629	0.0248	0.387 - 0.470
GTX-2	µmol/kg	0.841	0.1376	16.4	22	0.809	0.0915	0.0367	0.780 - 0.902
GTX-3	µmol/kg	0.287	0.0365	12.7	22	0.286	0.0250	0.0097	0.271 - 0.303
STX	µmol/kg	0.311	0.0543	17.5	52	0.320	0.0385	0.0094	0.296 - 0.326
Total toxicity	µgSTXdiHCleq./kg	768	196.8	25.6	63	754	134.0	31.0	718 - 817
GTX-2,3	µmol/kg	0.996	0.2112	21.2	31	1.040	0.1440	0.0474	0.918 - 1.07

Indicative Values BT12

Method: Toxins(SF) - BT12

Element	Unit	Mean	Std.Dev.	CV %	N	Median	MAD	Uncertainty	95 % confidence limits
C1	µmol/kg	0.0452	0.0012	2.7	5	0.0450	0.0010	0.0007	0.0439 - 0.0466
GTX-4	µmol/kg	0.154	0.0797	51.7	20	0.185	0.0604	0.0223	0.117 - 0.192
GTX-5	µmol/kg	0.0413	0.0273	66.0	18	0.0480	0.0193	0.0080	0.0278 - 0.0549
NEO	µmol/kg	0.196	0.1414	72.3	29	0.237	0.0981	0.0328	0.142 - 0.249
GTX-1,4	µmol/kg	0.593	0.1936	32.6	22	0.615	0.1180	0.0516	0.507 - 0.678