QUASIMEME

Quality assurance of information for marine environmental monitoring

Certificate of Analysis

PSP shellfish toxins

REFERENCE MATERIAL

BT12 sample 18

WAGENINGEN
UNIVERSITY & RESEARCH

Certificate of Analysis BT12 18

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 18 of Mediterrannean Mussel (Mytilus galloprovancialis) from Marine Institute, Galay, 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
2023.2	BT12	QST347BT
2022.1	BT12	QST320BT
2020.2	BT12	QST294BT
2019.1	BT12	QST268BT

Consensus Values BT12

Method: Toxins(SF) - BT12

Element	Unit	Mean	Std.Dev.	CV %	N	Median	MAD	Uncertainty	95 % confidence limits
STX	µmol/kg	0.0867	0.0373	43.0	91	0.0946	0.0246	0.0049	0.0789 - 0.0945
dc-STX	µmol/kg	1.72	0.518	30.1	129	1.68	0.380	0.057	1.63 - 1.81
Total toxicity	µgSTXdiHCleq./kg	705	239.0	33.9	134	691	176.4	25.8	664 - 746

Indicative Values BT12

Method: Toxins(SF) - BT12

Element	Unit	Mean	Std.Dev.	CV %	N	Median	MAD	Uncertainty	95 % confidence limits
GTX-2	µmol/kg	0.0850	0.0367	43.2	30	0.0913	0.0207	0.0084	0.0713 - 0.0987
GTX-3	µmol/kg	0.0343	0.0181	52.8	25	0.0370	0.0120	0.0045	0.0269 - 0.0418
GTX-5	µmol/kg	0.0666	0.0326	48.9	48	0.0695	0.0214	0.0059	0.0571 - 0.0760
GTX-6	µmol/kg	-	-	-	4	0.112	0.1	-	- - -
GTX-2,3	µmol/kg	0.0784	0.0430	54.8	41	0.0929	0.0219	0.0084	0.0648 - 0.0919
GTX-1,4	µmol/kg	-	-	-	5	0.112	0.1	-	- - -