



QUASIMEME

Quality assurance of information
for marine environmental monitoring

Certificate of Analysis



PSP shellfish toxins

REFERENCE MATERIAL

BT12 sample 23



Certificate of Analysis BT12 23

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, the 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 8 results and a maximum relative uncertainty of 6.25%. Indicative Values are based on a maximum relative uncertainty of 35% and a minimum of 4 and maximum of 7 results, or a relative uncertainty greater than 6.25% when there are at least 8 results.

For each determinand the following parameters are given: mean, standard deviation, coefficient of variation, number of results, median, MAD (Median of Absolute Deviation), the uncertainty of the mean (consensus or indicative) value and the relative uncertainty.

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 23 of Oyster (*Crassostrea gigas*) from Marine Institute, Galway, 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
2024.1	BT12	QST356BT
2022.2	BT12	QST330BT
2021.2	BT12	QST313BT



Consensus Values BT12

Method: Toxins(SF) - BT12

Element	Unit	Mean	Std.Dev.	CV %	N	Median	MAD	Uncertainty	Rel.Uncert. %
STX	μmol/kg	0.656	0.124	18.9	110	0.654	0.074	0.015	2.25
GTX-2	μmol/kg	3.44	0.737	21.4	40	3.53	0.522	0.146	4.23
GTX-3	μmol/kg	1.22	0.234	19.2	39	1.22	0.125	0.047	3.84
Total toxicity	μgSTXdiHCleq./kg	1181	255	21.6	109	1195	159	30.5	2.58
GTX-2,3	μmol/kg	4.32	1.15	26.7	76	4.53	0.740	0.165	3.82



Indicative Values BT12

Method: Toxins(SF) - BT12

Element	Unit	Mean	Std.Dev.	CV %	N	Median	MAD	Uncertainty	Rel.Uncert. %
dc-STX	μmol/kg	0.028	0.029	102.2	13	0.113	0.107	0.010	35.4
C-1,2	μmol/kg	0.038	0.038	99.3	12	0.047	0.023	0.014	35.8
dc-GTX-2,3	μmol/kg	0.076	0.084	110.1	19	0.124	0.067	0.024	31.6