

QUASIMEME

Quality assurance of information for marine environmental monitoring

Certificate of Analysis



PSP shellfish toxins

REFERENCE MATERIAL

BT12 sample 29





Certificate of Analysis BT12 29

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 29 of Blue mussels from CEFAS, United Kingdom 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	QST358BT



Consensus Values BT12



Method: Toxins(SF) - BT12									
Element	Unit	Mean	Std.Dev.	CV %	Ν	Median	MAD	Uncertainty	Rel.Uncert. %
STX	µmol/kg	0.959	0.246	25.7	38	0.958	0.160	0.050	5.21
GTX-5	µmol/kg	8.10	1.78	22.0	38	7.96	1.03	0.361	4.46
dc-STX	µmol/kg	1.60	0.441	27.5	38	1.59	0.256	0.089	5.58
Total toxicity	µgSTXdiHCleq./kg	1748	493	28.2	40	1727	276	97.4	5.57
GTX-2,3	µmol/kg	0.825	0.156	18.9	29	0.840	0.120	0.036	4.38



Indicative Values BT12



Method: Toxins(SF) - BT12									
Element	Unit	Mean	Std.Dev.	CV %	Ν	Median	MAD	Uncertainty	Rel.Uncert. %
GTX-2	µmol/kg	0.705	0.190	26.9	12	0.707	0.102	0.069	9.72
GTX-3	µmol/kg	0.280	0.084	29.9	11	0.293	0.051	0.031	11.3
C1	µmol/kg	2.57	1.26	49.0	12	2.84	0.870	0.454	17.7
C2	µmol/kg	0.760	0.385	50.7	10	0.769	0.259	0.152	20.0
dc-GTX2	µmol/kg	0.589	0.204	34.6	11	0.579	0.171	0.077	13.1
dc-GTX3	µmol/kg	0.184	0.078	42.6	11	0.180	0.060	0.030	16.1
GTX-1,4	µmol/kg	0.494	0.548	111.0	11	0.682	0.417	0.207	41.8
C-1,2	µmol/kg	2.57	0.785	30.5	28	2.58	0.609	0.185	7.21
dc-GTX-2,3	µmol/kg	0.481	0.219	45.5	22	0.485	0.130	0.058	12.1