



QUASIMEME

Quality assurance of information
for marine environmental monitoring

Certificate of Analysis



PSP shellfish toxins

REFERENCE MATERIAL

BT12 sample 31



Certificate of Analysis BT12 31

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 31 of Mussel tissue 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
2025.1	BT12	QST376BT



Consensus Values BT12

Method: Toxins(SF) - BT12

Element	Unit	Mean	Std.Dev.	CV %	N	Median	MAD	Uncertainty	Rel.Uncert. %
STX	μmol/kg	0.983	0.203	20.7	35	1.00	0.156	0.043	4.37
GTX-5	μmol/kg	5.80	1.09	18.8	34	5.70	0.561	0.234	4.03
dc-STX	μmol/kg	1.05	0.214	20.3	34	1.06	0.126	0.046	4.36
Total toxicity	μgSTXdiHCleq./kg	2064	524	25.4	36	2135	312	109	5.29
GTX-2,3	μmol/kg	2.91	0.530	18.2	25	2.87	0.407	0.133	4.56
C-1,2	μmol/kg	6.22	1.06	17.1	25	6.14	0.591	0.265	4.26



Indicative Values BT12

Method: Toxins(SF) - BT12

Element	Unit	Mean	Std.Dev.	CV %	N	Median	MAD	Uncertainty	Rel.Uncert. %
GTX-2	μmol/kg	2.46	0.819	33.3	12	2.43	0.519	0.295	12.0
GTX-3	μmol/kg	0.787	0.215	27.4	12	0.811	0.139	0.078	9.88
C1	μmol/kg	5.02	1.56	31.2	11	5.11	0.873	0.590	11.7
C2	μmol/kg	1.64	0.646	39.3	11	1.53	0.362	0.244	14.8
dc-GTX2	μmol/kg	1.39	0.807	58.2	11	1.42	0.505	0.304	21.9
dc-GTX3	μmol/kg	0.424	0.184	43.3	12	0.449	0.151	0.066	15.6
GTX-1,4	μmol/kg	1.30	1.78	137.4	11	1.38	1.38	0.672	51.8
dc-GTX-2,3	μmol/kg	1.11	0.347	31.3	25	1.15	0.171	0.087	7.83