

QUASIMEME

Quality assurance of information for marine environmental monitoring

Certificate of Analysis



PSP shellfish toxins

REFERENCE MATERIAL
BT12 sample 28





Certificate of Analysis BT12 28

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 28 of Surf Clams (Spisula solida) from CEFAS, Weymouth 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
	3 -	Round Id
2025.1	BT12	QST375BT
2023.2	BT12	QST349BT







Method: Toxins(SF) - BT12

Element	Unit	Mean	Std.Dev.	CV %	N	Median	MAD	Uncertainty	Rel.Uncert. %
STX	μmol/kg	0.427	0.134	31.3	63	0.410	0.084	0.021	4.94
dc-STX	μmol/kg	1.07	0.368	34.6	66	1.08	0.189	0.057	5.32
Total toxicity	µgSTXdiHCleq./kg	627	258	41.1	69	642	152	38.8	6.19







Method: Toxins(SF) - BT12

Element NEO	Unit µmol/kg	Mean 0.084	Std.Dev. 0.126	CV % 148.8	N 13	Median 0.250	MAD 0.224	Uncertainty 0.044	Rel.Uncert. % 51.6
GTX-2	µmol/kg	0.138	0.075	54.5	18	0.152	0.047	0.022	16.0
GTX-3	µmol/kg	0.066	0.053	79.5	14	0.075	0.031	0.018	26.6
dc-GTX2	µmol/kg	0.217	0.112	51.7	18	0.245	0.059	0.033	15.2
dc-GTX3	µmol/kg	0.078	0.036	46.7	18	0.083	0.021	0.011	13.7
GTX-2,3	µmol/kg	0.138	0.060	43.7	31	0.144	0.035	0.014	9.80
GTX-1,4	µmol/kg	0.088	0.195	220.6	8	0.310	0.258	0.086	97.5
dc-GTX-2,3	µmol/kg	0.154	0.078	51.0	27	0.170	0.049	0.019	12.3