



QUASIMEME

Quality assurance of information
for marine environmental monitoring

Certificate of Analysis



DSP shellfish toxins

REFERENCE MATERIAL

BT11 sample 36



Certificate of Analysis BT11 36

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 BT11 sample 36 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
2024.2	BT11	QST364BT



Consensus Values BT11

Method: Toxins(SF) - BT11

Element	Unit	Mean	Std.Dev.	CV %	N	Median	MAD	Uncertainty	Rel.Uncert. %
free-Okadaic-Acid	µg/kg	109	24.8	22.8	37	107	14.6	5.11	4.68
Free-DTX1	µg/kg	16.0	3.85	24.1	26	16.2	2.15	0.943	5.90
Total-free-OA+DTX1+DTX2	µg OA eq./kg	122	28.3	23.3	32	122	16.2	6.26	5.15
Total-DTX1	µg/kg	27.6	7.37	26.7	32	28.8	5.00	1.63	5.90
Total OA group + PTX group	µg OA eq./kg	427	71.3	16.7	13	434	51.0	24.7	5.79



Indicative Values BT11

Method: Toxins(SF) - BT11

Element	Unit	Mean	Std.Dev.	CV %	N	Median	MAD	Uncertainty	Rel.Uncert. %
Total-Okadaic-Acid	µg/kg	391	149	38.2	37	393	85.9	30.7	7.85
Total-hy-OA+DTX1+DTX2	µg OA eq./kg	424	149	35.1	36	423	87.7	31.0	7.30
PTX-2	µg/kg	4.23	2.40	56.8	5	4.20	1.34	1.34	31.7
YTX	mg/kg	1.08	0.330	30.7	37	1.11	0.175	0.068	6.31
45-OH-YTX	mg/kg	0.020	0.008	38.7	15	0.023	0.004	0.003	12.5
Total-YTX	mg YTX eq./kg	1.06	0.367	34.6	29	1.01	0.188	0.085	8.03