



QUASIMEME

Quality assurance of information
for marine environmental monitoring

Certificate of Analysis



DSP shellfish toxins

REFERENCE MATERIAL

BT11 sample 30



Certificate of Analysis BT11 30

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 30 of Mussel (*Mytilus Edulis*) 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	BT11	QST354BT
2021.2	BT11	QST310BT



Consensus Values BT11

Method: Toxins(SF) - BT11

Element	Unit	Mean	Std.Dev.	CV %	N	Median	MAD	Uncertainty	Rel.Uncert. %
free-Okadaic-Acid	µg/kg	107	24.2	22.5	79	108	14.2	3.40	3.17
Free-DTX2	µg/kg	213	42.0	19.8	75	209	27.9	6.07	2.85
Total-free-OA+DTX1+DTX2	µg OA eq./kg	238	45.4	19.1	71	239	29.3	6.74	2.83
Total-Okadaic-Acid	µg/kg	246	44.7	18.2	79	243	32.1	6.29	2.56
Total-DTX2	µg/kg	292	60.8	20.8	79	297	35.0	8.55	2.93
Total-hy-OA+DTX1+DTX2	µg OA eq./kg	426	77.3	18.2	77	429	44.0	11.0	2.59
Total OA group + PTX group	µg OA eq./kg	424	91.7	21.6	46	428	57.6	16.9	3.98



Indicative Values BT11

Method: Toxins(SF) - BT11

Element	Unit	Mean	Std.Dev.	CV %	N	Median	MAD	Uncertainty	Rel.Uncert. %
AZA-1	µg/kg	1.09	1.57	143.2	10	5.09	3.11	0.619	56.6
AZA-3	µg/kg	1.05	1.13	107.8	13	4.66	3.07	0.392	37.4
AZA-total	µg AZA eq./kg	1.67	2.99	178.6	15	6.50	5.51	0.964	57.7
PTX-2	µg/kg	2.47	1.88	76.3	17	3.25	1.05	0.571	23.1