QUASIMEME

Quality assurance of information for marine environmental monitoring

Certificate of Analysis

PSP shellfish toxins

REFERENCE MATERIAL

BT12 sample 28

WAGENINGEN
UNIVERSITY & RESEARCH

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 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 10 results while the relative uncertainty is smaller than 6.25%. Indicative Values are based on a relative uncertainty of maximum 35% with at least 4 and less than 10 results or a relative uncertainty higher than 6.25%.

For each determinand the following parameters are given: mean, standard deviation, coefficient of variation, number of results, median, MAD (Median of Absolute Deviation) and the uncertainty in the assigned value. The confidence limits (at 95 % probabilty) are calculated for these determinands.

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 Round Id
2023.2	BT12	QST349BT

Indicative Values BT12

Method: Toxins(SF) - BT12

Element	Unit	Mean	Std.Dev.	CV %	N	Median	MAD	Uncertainty	95 % confidence limits
STX	µmol/kg	0.427	0.1575	36.8	32	0.436	0.0952	0.0348	0.371 - 0.484
GTX-2	µmol/kg	0.135	0.0669	49.6	9	0.150	0.0400	0.0279	0.0846 - 0.186
GTX-3	µmol/kg	0.0780	0.0353	45.2	6	0.0815	0.0150	0.0180	0.0428 - 0.113
dc-STX	µmol/kg	1.06	0.432	40.9	32	1.07	0.305	0.096	0.901 - 1.21
dc-GTX2	µmol/kg	0.234	0.1350	57.6	9	0.244	0.0740	0.0563	0.133 - 0.336
dc-GTX3	µmol/kg	0.0837	0.0256	30.5	10	0.0830	0.0170	0.0101	0.0657 - 0.102
Total toxicity	µgSTXdiHCleq./kg	636	277.8	43.7	35	640	210.0	58.7	540 - 731
GTX-2,3	µmol/kg	0.145	0.0573	39.6	15	0.145	0.0330	0.0185	0.113 - 0.176
dc-GTX-2,3	µmol/kg	0.167	0.0790	47.3	14	0.175	0.0416	0.0264	0.122 - 0.212