QUASIMEME

Quality assurance of information for marine environmental monitoring

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Certificate of Analysis

Triazines and organophosphorus compounds in seawater

REFERENCE MATERIAL

AQ8 sample 127

WAGENINGEN
UNIVERSITY & RESEARCH

Certificate of Analysis AQ8 127

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.

Please note: Most WEPAL-QUASIMEME reference materials are found to be stable over the long term (>10 years) for most determinand/matrix combinations. There are a few exceptions known to us as being less stable over the long term. These are organotins in sediment (MS6), ASP in shellfish (BT7), some PAHs and PCBs in sediment (SETOC) and N-NH_4 (as N) in clay soils (ISE).

Sample information

QUASIMEME reference materials cover a range of natural SeaWater species from contaminated waters from the North Sea and/or Mediterranean.

This AQ8 sample 127 of Seawater with spike solution from North Sea, the Netherlands 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	AQ8	QTP119SW

Consensus Values AQ8

Method: OPs&Herb - AQ8

Element	Unit	Mean	Std.Dev.	CV %	N	Median	MAD	Uncertainty	Rel.Uncert. %
Simazine	ng/l	66.5	6.93	10.4	9	67.0	4.00	2.89	4.35
Diuron	ng/l	129	15.7	12.2	9	120	19.0	6.54	5.07

Indicative Values AQ8

Method: OPs&Herb - AQ8

Element	Unit	Mean	Std.Dev.	CV %	N	Median	MAD	Uncertainty	Rel.Uncert. %
Atrazine	ng/l	140	32.3	23.1	10	146	20.5	12.8	9.12
Azinphos-methyl	ng/l	88.7	6.93	7.8	4	90.9	3.60	4.33	4.88
Azinphos-ethyl	ng/l	57.2	12.3	21.5	4	57.7	5.60	7.67	13.4
Fenthion	ng/l	82.5	24.4	29.5	4	82.0	11.1	15.2	18.4
Malathion	ng/l	30.5	20.3	66.7	6	26.4	9.76	10.4	34.0
Parathion-ethyl	ng/l	71.9	13.2	18.4	4	72.9	5.95	8.28	11.5
Parathion-methyl	ng/l	46.5	13.3	28.6	4	46.8	6.05	8.30	17.9
Fenitrothion	ng/l	45.5	23.6	51.9	4	45.9	13.5	14.7	32.4
Dichlorvos	ng/l	67.1	23.4	34.9	7	65.0	11.0	11.1	16.5
Chlorfenvinphos	ng/l	129	36.6	28.4	8	126	23.2	16.2	12.5
Diazinon	ng/l	158	87.8	55.5	5	171	39.1	49.1	31.0
Dimethoate	ng/l	67.0	21.1	31.5	6	64.4	8.32	10.8	16.1
Irgarol-1051	ng/l	51.9	7.40	14.3	6	50.8	3.35	3.78	7.28
Atrazine-desethyl	ng/l	36.4	6.13	16.9	5	35.7	2.09	3.43	9.43
Terbuthylazine	ng/l	69.8	24.5	35.1	7	70.4	11.6	11.6	16.6
Chlorpyrifos	ng/l	65.4	23.5	35.9	7	53.0	29.0	11.1	17.0
Isoproturon	ng/l	29.1	3.93	13.5	7	29.6	2.10	1.86	6.38
Alachlor	ng/l	99.9	17.4	17.4	7	101	9.20	8.22	8.22
Thiamethoxam	ng/l	49.9	6.55	13.1	5	50.0	3.80	3.66	7.34
Thiacloprid	ng/l	80.3	17.6	21.9	5	82.0	10.0	9.85	12.3
Terbutryn	ng/l	91.0	19.3	21.3	7	95.8	10.8	9.14	10.0
Quinoxyfen	ng/l	21.1	8.36	39.6	6	22.5	4.03	4.27	20.2
Imidacloprid	ng/l	110	66.1	60.3	5	115	40.4	37.0	33.7
Dicofol	ng/l	8.22	3.01	36.7	4	9.05	1.61	1.88	22.9
Cypermethrin	ng/l	34.7	3.20	9.2	4	35.5	1.70	2.00	5.76
Chlotianidin	ng/l	67.3	19.6	29.2	5	67.0	10.9	11.0	16.3
Bifenox	ng/l	27.0	6.70	24.8	4	28.2	2.89	4.19	15.5
Aclonifen	ng/l	52.5	23.6	45.1	7	53.2	13.8	11.2	21.3