



QUASIMEME

Quality assurance of information
for marine environmental monitoring

Certificate of Analysis



Triazines and organophosphorus compounds in seawater

REFERENCE MATERIAL

AQ8 sample 118



Certificate of Analysis AQ8 118

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 % probability) are calculated for these determinands.

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 118 of Seawater with spike solution from North Sea 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
2022.1	AQ8	QTP110SW



Consensus Values AQ8

Method: OPs&Herb - AQ8

Element	Unit	Mean	Std.Dev.	CV %	N	Median	MAD	Uncertainty	95 % confidence limits		
Atrazine	ng/l	90.8	13.53	14.9	12	90.0	9.21	4.88	82.3	-	99.3
Simazine	ng/l	78.6	12.07	15.4	11	83.5	8.50	4.55	70.6	-	86.6



Indicative Values AQ8

Method: OPs&Herb - AQ8

Element	Unit	Mean	Std.Dev.	CV %	N	Median	MAD	Uncertainty	95 % confidence limits		
Aclonifen	ng/l	43.7	6.81	15.6	6	44.1	4.50	3.48	36.9	-	50.5
Alachlor	ng/l	26.6	3.82	14.4	8	26.8	2.56	1.69	23.5	-	29.7
Atrazine-desethyl	ng/l	117	37.8	32.5	7	115	29.1	17.9	82.7	-	150
Azinphos-ethyl	ng/l	82.1	13.66	16.6	5	83.5	9.61	7.64	66.4	-	97.8
Bifenox	ng/l	37.0	3.55	9.6	6	37.1	2.35	1.81	33.5	-	40.6
Chlorfenvinphos	ng/l	45.6	8.35	18.3	10	45.9	5.73	3.30	39.7	-	51.5
Chlorpyrifos	ng/l	86.5	11.00	12.7	9	87.2	7.29	4.59	78.2	-	94.8
Cypermethrin	ng/l	42.6	9.57	22.5	7	43.0	6.60	4.52	34.0	-	51.1
Deltamethrin	ng/l	19.2	5.57	29.0	4	21.0	3.00	3.48	11.4	-	26.9
Diazinon	ng/l	86.9	13.93	16.0	6	86.8	10.25	7.11	73.0	-	101
Dichlorvos	ng/l	111	40.5	36.4	7	120	29.8	19.1	75.2	-	148
Dicofol	ng/l	25.1	4.21	16.7	5	24.8	3.20	2.35	20.3	-	30.0
Dimethoate	ng/l	98.4	15.61	15.9	8	99.7	12.00	6.90	85.7	-	111
Diuron	ng/l	133	17.0	12.8	9	131	11.5	7.1	120	-	146
Fenitrothion	ng/l	85.9	16.84	19.6	7	88.3	11.70	7.96	70.8	-	101
Fenthion	ng/l	66.3	19.64	29.6	5	62.9	15.10	10.98	43.7	-	88.9
Imidacloprid	ng/l	81.3	22.45	27.6	4	79.9	14.08	14.03	50.1	-	112
Irgarol-1051	ng/l	116	8.3	7.1	6	116	5.5	4.2	108	-	125
Isoproturon	ng/l	116	17.8	15.4	9	120	11.0	7.4	102	-	129
Malathion	ng/l	68.8	10.25	14.9	6	67.8	6.85	5.23	58.6	-	79.1
Parathion-ethyl	ng/l	142	29.8	21.0	7	140	20.0	14.1	115	-	168
Parathion-methyl	ng/l	95.1	32.19	33.8	7	90.8	22.70	15.21	66.4	-	124
Permethrin	ng/l	47.5	15.39	32.4	4	48.3	10.00	9.62	26.1	-	68.8
Quinoxifen	ng/l	101	22.0	21.7	7	103	15.7	10.4	81.6	-	121
Terbutryn	ng/l	92.1	17.57	19.1	7	89.7	12.44	8.30	76.4	-	108
Terbutylazine	ng/l	98.3	14.68	14.9	8	97.1	10.15	6.49	86.3	-	110
Thiacloprid	ng/l	92.6	15.92	17.2	4	90.6	10.41	9.95	70.5	-	115
Thiamethoxam	ng/l	80.5	5.30	6.6	4	78.4	4.08	3.31	73.1	-	87.9
Triazophos	ng/l	47.7	5.31	11.1	4	47.7	3.50	3.32	40.3	-	55.0