



# 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 121

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## Certificate of Analysis    AQ8 121

### 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 121 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
2023.1	AQ8	QTP113SW



### Consensus Values AQ8

#### Method: OPs&Herb - AQ8

Element	Unit	Mean	Std.Dev.	CV %	N	Median	MAD	Uncertainty	95 % confidence limits		
Atrazine	ng/l	147	18.7	12.7	12	147	9.2	6.7	135	-	159
Dichlorvos	ng/l	113	15.6	13.8	10	110	9.5	6.1	102	-	124
Chlorfenvinphos	ng/l	56.2	8.38	14.9	11	56.0	4.25	3.16	50.6	-	61.7
Simazine	ng/l	148	20.8	14.0	12	147	12.0	7.5	135	-	162
Chlorpyrifos	ng/l	125	13.7	11.0	10	124	6.3	5.4	115	-	134
Isoproturon	ng/l	103	15.8	15.2	12	101	10.3	5.7	93.5	-	113



## Indicative Values AQ8

### Method: OPs&Herb - AQ8

Element	Unit	Mean	Std.Dev.	CV %	N	Median	MAD	Uncertainty	95 % confidence limits		
Azinphos-methyl	ng/l	50.4	2.84	5.6	6	50.5	2.34	1.45	47.5	-	53.2
Azinphos-ethyl	ng/l	150	13.8	9.2	6	150	7.3	7.0	136	-	164
Fenthion	ng/l	-	-	-	4	69.6	5.1	-	-	-	-
Malathion	ng/l	55.1	5.27	9.6	7	55.0	2.96	2.49	50.4	-	59.8
Parathion-ethyl	ng/l	103	15.3	14.9	6	107	7.5	7.8	87.4	-	118
Parathion-methyl	ng/l	86.2	20.60	23.9	6	86.0	18.60	10.51	65.6	-	107
Fenitrothion	ng/l	124	32.7	26.4	6	120	21.5	16.7	91.0	-	156
Diazinon	ng/l	80.3	14.61	18.2	7	76.9	7.22	6.90	67.2	-	93.3
Dimethoate	ng/l	88.1	27.59	31.3	8	95.1	13.62	12.19	65.6	-	111
Omethoate	ng/l	-	-	-	4	75.7	8.2	-	-	-	-
Irgarol-1051	ng/l	78.0	11.31	14.5	7	78.0	5.02	5.34	67.9	-	88.1
Atrazine-desethyl	ng/l	74.9	7.26	9.7	8	75.6	5.42	3.21	68.9	-	80.8
Terbutylazine	ng/l	115	19.0	16.6	10	114	10.8	7.5	101	-	128
Diuron	ng/l	136	25.8	19.0	12	133	15.2	9.3	120	-	152
Alachlor	ng/l	56.9	13.18	23.1	9	56.9	8.07	5.49	47.0	-	66.9
Thiamethoxam	ng/l	-	-	-	5	58.1	22.1	-	-	-	-
Thiacloprid	ng/l	69.3	14.70	21.2	7	72.9	6.22	6.94	56.2	-	82.5
Terbutryn	ng/l	76.4	8.33	10.9	8	77.1	6.00	3.68	69.6	-	83.2
Quinoxifen	ng/l	70.8	15.03	21.2	8	69.5	11.59	6.64	58.5	-	83.0
Nicosulfuron	ng/l	-	-	-	4	22.8	5.5	-	-	-	-
Imidacloprid	ng/l	189	30.4	16.1	6	193	19.8	15.5	158	-	219
Dicofol	ng/l	-	-	-	5	45.0	14.6	-	-	-	-
Cypermethrin	ng/l	22.7	11.88	52.4	6	22.5	8.90	6.06	10.8	-	34.5
Chlotianidin	ng/l	-	-	-	5	37.0	2.4	-	-	-	-
Bifenox	ng/l	88.4	26.05	29.5	6	84.5	17.13	13.29	62.4	-	114
Aclonifen	ng/l	62.5	7.79	12.5	9	61.3	2.45	3.25	56.6	-	68.4