

AQ-8 Triazines and Organophosphorus Pesticides in Seawater	
Year: 2024	Participants: 10 laboratories expected
Number of rounds: 1 per year	Start exercise: 1 April
Number of materials: 3 per round	Sample size: 1000 ml

[Participation form](#)
[Timetable](#)
[PT Scheme](#)
[Costs](#)

This study covers the determination of triazines and organophosphorus pesticides in seawater and low salinity seawater test materials.

Test Materials

The seawater for this study is collected from the Eastern Atlantic Ocean and is filtered to remove bacteria and particles. The low salinity test material is prepared by dilution with ultra-pure demineralised water. The test materials are thoroughly mixed and dispensed into one-litre glass bottles. These bottles are distributed together with methanol standard solutions containing the compounds to be analysed. The participants are asked to dilute the supplied standard solutions using the supplied seawater test materials to produce the spiked test materials.

Homogeneity of the test materials is assumed, as they are spiked to the same concentration level. The test materials are stable for the purposes of the exercise.

Determinands and Concentration Ranges

The triazines and organophosphorus compounds to be determined are given in the table below. The table also shows:

- The expected concentration range for the determinands in the spiked test materials.
- The constant and proportional error that will be used for assessment of the results.

Determinand*	Unit	Concentration range		Error	
		Low salinity Seawater (spiked)	Seawater (spiked)	Const	Prop
Aclonifen	ng/L	20-2000	2-200		
Alachlor	ng/L	20-2000	2-200	0.5	20.0%
Atrazine	ng/L	20-2000	5-200	0.5	17.5%
Atrazine-desethyl	ng/L	20-2000	5-200		
Azinphos-ethyl	ng/L	20-2000	5-200	5	25.0%
Azinphos-methyl	ng/L	20-2000	5-200	10	25.0%
Bifenox	ng/L	20-2000	5-200		
Bifenthrin	ng/L	20-2000	5-200		
Chlorfenvinphos	ng/L	20-2000	5-200	5	20.0%
Chlorpyrifos	ng/L	20-2000	5-200	2	17.5%
Chlotianidin	ng/L	20-2000	5-200		
Coumaphos	ng/L	20-2000	5-200		

Determinand*	Unit	Concentration range		Error	
		Low salinity Seawater (spiked)	Seawater (spiked)	Const	Prop
Cypermethrin	ng/L	20-2000	5-200		
Deltamethrin	ng/L	20-2000	5-200		
Demeton	ng/L	20-2000	5-200		
Diazinon	ng/L	20-2000	5-200	2	20.0%
Dichlorvos	ng/L	20-2000	5-200	1	22.5%
Dicofol	ng/L	20-2000	5-200		
Dimethoate	ng/L	20-2000	5-200	2.5	25.0%
Diuron	ng/L	20-2000	5-200	1	15.0%
Esfenvalerate	ng/L	20-2000	5-200		
Fenchlorphos	ng/L	20-2000	5-200		
Fenitrothion	ng/L	20-2000	5-200	5	25.0%
Fenthion	ng/L	20-2000	5-200		
Glyphosate	ng/L	20-2000	5-200		
Imidacloprid	ng/L	20-2000	5-200		
Irgarol-1051	ng/L	20-2000	5-200	3	10.0%
Isoproturon	ng/L	20-2000	5-200	0.01	17.5%
Malathion	ng/L	20-2000	5-200	1	20.0%
Nicosulfuron	ng/L	20-2000	5-200		
Omethoate	ng/L	20-2000	5-200		
Parathion-ethyl	ng/L	20-2000	5-200	2	25.0%
Parathion-methyl	ng/L	20-2000	5-200	5	25.0%
Permethrin	ng/L	20-2000	5-200		
Quinoxifen	ng/L	20-2000	5-200		
Simazine	ng/L	20-2000	5-200	0.5	15.0%
Terbutryn	ng/L	20-2000	5-200		
Terbutylazine	ng/L	20-2000	5-200		
Thiacloprid	ng/L	20-2000	5-200		
Thiamethoxam	ng/L	20-2000	5-200		
Triazophos	ng/L	20-2000	5-200		
Triclosan	ng/L	20-2000	5-200		

* This exercise is not in the scope of accreditation.