

MS-2 Chlorinated Organics in Sediment	
Year: 2024	Participants: 25 laboratories expected
Number of rounds: 2 per year	Start exercise: 1 April, 1 October
Number of materials: 2 per round	Sample size: 50 g

[Participation form](#)
[Timetable](#)
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This study covers the determination of poly chlorinated biphenyls (PCBs), organochlorine pesticides (OCPs) and total organic carbon (TOC) in marine sediment.

Test Materials

The test materials cover a range of natural sediments from contaminated waters from the North Sea and/or Mediterranean. Each batch of material is prepared in bulk. The level of within and between sample homogeneity for the sediment is determined. All materials show to be homogeneous and stable for the purpose of the test.

Determinands and Concentration Ranges

The organochlorines to be determined are given in the table below. The table also shows:

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

Determinand*	Unit	Concentration Range	Error	
		Sediment	Const	Prop
PCB18	µg/kg	0.1-10		
PCB28	µg/kg	0.1-100	0.05	20.0%
PCB31	µg/kg	0.1-100	0.05	22.5%
PCB44	µg/kg	0.1-100		
PCB47	µg/kg	0.1 - 50		
PCB49	µg/kg	0.02 - 100		
PCB52	µg/kg	0.1-500	0.15	17.5%
PCB66	µg/kg	0.02 - 100		
PCB99	µg/kg			
PCB101	µg/kg	0.2-300	0.15	20.0%
PCB105	µg/kg	0.1-50	0.1	15.0%
PCB107	µg/kg			
PCB108	µg/kg			
PCB109	µg/kg			
PCB110	µg/kg	0.1-100		
PCB111	µg/kg			
PCB112	µg/kg			
PCB113	µg/kg			

Determinand*	Unit	Concentration Range	Error	
		Sediment	Const	Prop
PCB114	µg/kg			
PCB118	µg/kg	0.1-200	0.15	15.0%
PCB128	µg/kg	0.05-5	0.05	20.0%
PCB138+PCB163	µg/kg	0.2-50	0.3	15.0%
PCB138	µg/kg	0.2-50	0.25	20.0%
PCB141	µg/kg	0.05-10		
PCB149	µg/kg	0.05-100	0.25	20.0%
PCB151	µg/kg	0.1-20		
PCB153	µg/kg	0.2-100	0.25	17.5%
PCB156	µg/kg	0.05-5	0.05	22.5%
PCB158	µg/kg	0.1-5		
PCB170	µg/kg	0.05-10	0.1	25.0%
PCB180	µg/kg	0.1-50	0.15	25.0%
PCB183	µg/kg	0.05-5		
PCB187	µg/kg			
PCB188	µg/kg	0.05-10		
PCB194	µg/kg	0.02-2		
PCB203	µg/kg			
PCB209	µg/kg			
α-HCH	µg/kg	0.02-1	0.03	25.0%
β-HCH	µg/kg	0.02-2	0.02	25.0%
γ-HCH	µg/kg	0.02-2	0.03	25.0%
δ-HCH	µg/kg	0.02-2		
HCB	µg/kg	0.05-250	0.04	25.0%
HCBD	µg/kg	0.02-10		
Dieldrin	µg/kg	0.1-10	0.06	25.0%
pp'-DDD	µg/kg	0.1-25	0.01	25.0%
pp'-DDE	µg/kg	0.1-20	0.01	25.0%
op'-DDT	µg/kg	0.02-250	0.2	25.0%
pp'-DDT	µg/kg	0.05-10	0.1	25.0%
Transnonachlor	µg/kg	0.01-2		
Heptachlor	µg/kg			
cis-Heptachlor epoxide	µg/kg			
Emamectin	µg/kg			
Teflubenzuron	µg/kg			
TOC	%	0.2-10	0.1	10.0%
PN	%			

*Determinands which are not in bold are not in the scope of accreditation.