

BT-2 Chlorinated Organics in Biota	
Year: 2024	Participants: 40 laboratories expected
Number of rounds: 2 per year	Start exercise: 1 April, 1 October
Number of materials: 2 per round	Sample size: 30-50 g

[Participation form](#)
[Timetable](#)
[PT Scheme](#)
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This study covers the determination poly chlorinated biphenyls (PCBs), organochlorine pesticides (OCPs), total and extractable lipid in biota test materials.

Test Materials

The test materials cover a range of natural biota species from contaminated waters from the North Sea and/or Mediterranean. The supplied biota test materials can consist of fish muscle, fish liver and shellfish tissue. Wet biota test materials are homogenised and sterilised by autoclaving. These biota test materials have been shown to be stable over a number of years when stored at room temperature.

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	
		Fish Liver tissue and Freshwater Fish	Fish Muscle Tissue	Shellfish Tissue	Const	Prop
PCB28	µg/kg	0.5-50	0.05-5	0.05-5	0.02	25.0%
PCB31	µg/kg	0.2-10	0.03-3	0.03-3	0.04	25.0%
PCB52	µg/kg	1-100	0.05-20	0.05-5	0.1	17.5%
PCB99	µg/kg					
PCB101	µg/kg	5-300	0.1-50	0.1-20	0.15	15.0%
PCB105	µg/kg	2-100	0.05-10	0.05-10	0.05	17.5%
PCB107	µg/kg					
PCB108	µg/kg					
PCB109	µg/kg					
PCB110	µg/kg					
PCB111	µg/kg					
PCB112	µg/kg					
PCB113	µg/kg					
PCB114	µg/kg					
PCB118	µg/kg	5-300	0.2-30	0.2-20	0.1	15.0%
PCB128	µg/kg					
PCB138+PCB163	µg/kg	10-600	0.3-70	0.3-30	0.3	17.5%

Determinand*	Unit	Concentration range			Error	
		Fish Liver tissue and Freshwater Fish	Fish Muscle Tissue	Shellfish Tissue	Const	Prop
PCB138	µg/kg	10-600	0.3-70	0.3-30	0.1	17.5%
PCB153	µg/kg	20-1000	0.4-100	0.4-40	0.1	17.5%
PCB156	µg/kg	0.5-40	0.03-10	0.03-10	0.05	17.5%
PCB170	µg/kg					
PCB180	µg/kg	2-200	0.05-20	0.05-5	0.03	17.5%
PCB183	µg/kg					
PCB187	µg/kg					
PCB194	µg/kg					
PCB203	µg/kg					
PCB209	µg/kg					
α-HCH	µg/kg	0.05-5	0.05-5	0.05-5	0.03	25.0%
β-HCH	µg/kg	0.1-5	0.05-5	0.05-5	0.03	25.0%
γ-HCH	µg/kg	0.05-5	0.05-5	0.05-5	0.05	25.0%
δ-HCH	µg/kg	0.05-5	0.05-5	0.05-5		
HCB	µg/kg	1-50	0.02-5	0.02-5	0.05	22.5%
HCBd	µg/kg	0.05-5				
Dieldrin	µg/kg	0.5-100	0.2-20	0.2-20	0.15	25.0%
pp'-DDD	µg/kg	0.5-100	0.1-10	0.1-10	0.01	25.0%
pp'-DDE	µg/kg	10-500	0.3-30	0.3-30	0.1	20.0%
op'-DDT	µg/kg	0.1-2	0.01-1	0.01-1	0.15	25.0%
pp'-DDT	µg/kg	0.1-10	0.1-10	0.1-10	0.1	25.0%
Transnonachlor	µg/kg	0.05-40	0.02-10	0.02-10	0.03	15.0%
Heptachlor	µg/kg					
cis-Heptachlor epoxide	µg/kg					
Cis-chlordane	µg/kg					
Trans-chlordane	µg/kg					
Oxychlordane	µg/kg					
Dicofol	µg/kg					
Total-Lipid	%				0.4	7.5%
Extractable-Lipid	%				0.4	7.5%

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