

DETERMINANDS IN WATERBASE-TCM

The following determinands are included in, but not exclusive to, the lists of:

- Water Framework Directive Priority Substances
- Water Framework Directive Priority Hazardous Substances
- Water Framework Directive Priority Substances under Review
- List I and II Substances of the Dangerous Substances Directive
- HELCOM Priority Substances
- OSPAR Priority Substances

Determinands for Inputs and Discharges only:

Determinand	Unit
Flow	m ³ /s
Volume	m ³

Nutrients, oxygen and organic matter:

The units noted in the determinand list have been used in the data tables.

Determinand	Unit	
	Unit in Water	Unit for Inputs and Discharges
Ammonium	µMol N	tonnes/y
BOD5	µMol O ₂	tonnes/y
BOD7	µMol O ₂	tonnes/y
Chlorophyll a	µg/l	
COD	µMol O ₂	tonnes/y
CODCr	mg/l O ₂	tonnes/y
CODMn	mg/l O ₂	tonnes/y
Dissolved Oxygen	µMol O ₂	
Nitrate	µMol N	tonnes/y
Nitrate to Orthophosphate Ratio	Molar ratio	
Nitrite	µMol N	tonnes/y
Orthophosphate	µMol P	tonnes/y
Oxygen Saturation	%	
Particulate Organic Nitrogen	µMol N	
Silicate	µMol Si	
Suspended Particulate Matter		tonnes/y
Total Inorganic Nitrogen		tonnes/y
Total Nitrogen	µMol N	tonnes/y
Total Nitrogen to Total Phosphorus ratio	molar ratio	
Total Organic Carbon	µMol C	tonnes/y
Total Organic Nitrogen	µMol N	

Determinand	Unit	
	Unit in Water	Unit for Inputs and Discharges
Total Oxidised Nitrogen	µMol N	
Total Phosphorus	µMol P	tonnes/y

Hazardous substances:

For concentrations of hazardous substances in biota and sediments, units are ng/kg, µg/kg or mg/kg. For concentrations in seawater, units are ng/l, µg/l or mg/l. The units currently used for determinands in the data tables are listed below.

CASNo	Determinand	Applied units			
		Biota	Sediment	Water	Loads
87-61-6	1,2,3-trichlorobenzene				
120-82-1	1,2,4-trichlorobenzene				
106-93-4	1,2-Dibromoethane	µg/kg	µg/kg		
107-06-2	1,2-Dichloroethane	µg/kg	µg/kg		
108-70-3	1,3,5-trichlorobenzene				
4904-61-4	1,5,9 cyclododecatriene				
90-12-0	1-Methylnaphthalene		µg/kg		
35065-29-3	2,2',3,4,4',5,5'-heptachlorobiphenyl (CB180)	µg/kg	µg/kg		
182677-30-1	2,2',3,4,4',5'-hexabromodiphenyl ether (BD(E)138)				
35065-28-2	2,2',3,4,4',5'-hexachlorobiphenyl (CB138)	µg/kg	µg/kg		
182346-21-0	2,2',3,4,4'-pentabromodiphenyl ether (BDE85)				
68631-49-2	2,2',4,4',5,5'-hexabromodiphenyl ether (BD(E)153)				
35065-27-1	2,2',4,4',5,5'-hexachlorobiphenyl (CB153)	µg/kg	µg/kg		
207122-15-4	2,2',4,4',5,6'-hexabromodiphenyl ether (BDE154)				
60348-60-9	2,2',4,4',5-pentabromodiphenyl ether (BDE99)				
189084-64-8	2,2',4,4',6-pentabromodiphenyl ether (BD(E)100)				
5436-43-1	2,2',4,4'-tetrabromodiphenyl ether (BDE47)				
37680-73-2	2,2',4,5,5'-pentachlorobiphenyl (CB101)	µg/kg	µg/kg		
35693-99-3	2,2',5,5'-tetrachlorobiphenyl (CB52)	µg/kg	µg/kg		
38380-08-4	2,3,3',4,4',5-hexachlorobiphenyl (CB156)	µg/kg	µg/kg		
69782-90-7	2,3,3',4,4',5'-hexachlorobiphenyl (CB157)				
32598-14-4	2,3,3',4,4'-pentachlorobiphenyl (CB105)	µg/kg	µg/kg		
31508-00-6	2,3',4,4',5-pentachlorobiphenyl (CB118)	µg/kg	µg/kg		
7012-37-5	2,4,4'-trichlorobiphenyl (CB28)	µg/kg	µg/kg		
93-76-5	2,4,5-T				
36065-30-2	2,4,6-Tribromophenyl 2-methyl-2,3-dibromopropyl ether				
732-26-3	2,4,6-tri-tert-butylphenol				
117-81-7	2-Ethylhexyl phthalate				
91-57-6	2-Methylnaphthalene				
57465-28-8	3,3',4,4',5 pentachlorobiphenyl (CB126)				

CASNo	Determinand	Applied units			
		Biota	Sediment	Water	Loads
32774-16-6	3,3',4,4',5,5' HexCB (PCB169)	µg/kg	µg/kg		
32598-13-3	3,3',4,4'-tetrachlorobiphenyl (CB77)	µg/kg	µg/kg		
793-24-8	4-(dimethylbutylamino) diphenylamin (6PPD)				
106-43-4	4-Chlorotoluene				
104-40-5	4-Nonylphenol				
84852-15-3	4-nonylphenol (branched)				
1806-26-4	4-Octylphenol				
98-51-1	4-tert-butyltoluene				
2051-24-3	5,5',6,6'-decachlorobiphenyl (CB209)	µg/kg	µg/kg		
83-32-9	Acenaphthene	µg/kg	µg/kg	ng/l	
208-96-8	Acenaphthylene		µg/kg		
107-13-1	Acrylonitrile				
GM	Adsorbable organic halogene				tonnes/y
15972-60-8	Alachlor				
309-00-2	Aldrin	µg/kg	µg/kg	ng/l	
959-98-8	alpha-Endosulfan				
319-84-6	alpha-HCH (alpha-hexachlorocyclohexane)		µg/kg		
7429-90-5	Aluminum and its compunds				
120-12-7	Anthracene	µg/kg	µg/kg	ng/l	
140-57-8	Aramite				
12767-79-2	Aroclor				
7440-38-2	Arsenic and its coumpounds		mg/kg		
1912-24-9	Atrazine				
71-43-2	Benzene				
56-55-3	Benzo[a]anthracene		µg/kg		
50-32-8	benzo-a-pyrene	µg/kg	µg/kg		
205-99-2	benzo-b-fluoranthene	µg/kg	µg/kg		
191-24-2	benzo-g,h,i-perylene	µg/kg	µg/kg		
207-08-9	benzo-k-fluoranthene	µg/kg	µg/kg		
319-86-8	beta-HCH	µg/kg	µg/kg	µg/l	
1163-19-5	Bis(pentabromophenyl) ether				
85-68-7	Butyl benzyl phthalate (BBP)				
85535-84-8	C10-13-Chloralkanes				
7440-43-9	Cadmium and its compounds	mg/kg	mg/kg	µg/l	kg/y
57-74-9	Chlordane				
1034-41-9	Chlordecone (Kepone)				
6164-98-3	Chlordimeform				
470-90-6	Chlorfenvinphos				
2921-88-2	Chlorpyrifos				
7440-47-3	Chromium and its compounds	mg/kg	mg/kg	µg/l	kg/y
218-01-9	Chrysene		µg/kg		
23593-75-1	Clotrimazole				
7440-48-4	Cobalt and its compounds				
7440-50-8	Copper and its compounds	mg/kg	mg/kg	µg/l	kg/y

CASNo	Determinand	Applied units			
		Biota	Sediment	Water	Loads
294-62-2	Cyclododecane				
53-19-0	DDD, o, p'	µg/kg	µg/kg	µg/l	
72-54-8	DDD, p, p'	µg/kg	µg/kg	µg/l	
3424-82-6	DDE, o, p'				
72-55-9	DDE, p, p'	µg/kg	µg/kg	µg/l	
789-02-6	DDT, o,p'	µg/kg	µg/kg	µg/l	
50-29-3	DDT, p,p'	µg/kg	µg/kg	µg/l	
919-86-8	Demeton-S-methyl				
	Detergents				ktonnes/y
117-81-7	Di (2-ethylhexyl) phthalate (DEHP)				
53-70-3	Dibenz[a,h]anthracene		µg/kg		
262-12-4	Dibenzodioxin				
84-74-2	Dibutylphthalate				
1002-53-5	Dibutyltin (DBT)				
75-09-2	Dichloromethane				
62-73-7	Dichlorvos				
115-32-2	Dicofol				
60-57-1	Dieldrin	µg/kg	µg/kg	ng/l	
84-66-2	Di-ethyl phthalate				
84-69-5	Di-iso-butyl phthalate				
60-51-5	Dimethoate				
512-04-9	Diosgenin				
1746-01-6	Dioxin				
32536-52-0	Diphenyl ether, octabromo deviate				
32534-81-9	Diphenyl ether, pentabromo derivative				
330-54-1	Diuron				
115-29-7	Endosulfan				
72-20-8	Endrin			ng/l	
2104-64-5	Ethyl O-(p-nitrophenyl) phenyl phosphonothionate (EPN)				
GM	Extractable organically bound chlorine				
GM	Extractable persistent organically bound chlorine				
70124-77-5	Flucythrinate				
86-73-7	Fluorene		µg/kg	ng/l	
144-49-0	Fluoroacetic acid				
206-44-0	Fluoroanthene	µg/kg	µg/kg	ng/l	
76-44-8	Heptachlor				
32241-08-0	Heptachloronaphthalene				
2440-02-0	Heptachloronorborene				
36355-01-8	Hexabromobiphenyl				
118-74-1	Hexachlorobenzene	µg/kg	µg/kg	ng/l	
87-68-3	Hexachlorobutadiene				
608-73-1	Hexachlorocyclohexane				

CASNo	Determinand	Applied units			
		Biota	Sediment	Water	Loads
77-47-4	Hexachlorocyclopentadiene (HCCP)				
1335-87-1	Hexachloronaphthalene				
107-46-0	Hexamethyldisiloxane (HMDS)				
	Hydrocarbons				tonnes/y
193-39-5	indeno(1,2,3-cd) pyrene	µg/kg	µg/kg		
7439-89-6	Iron and its compounds				
297-78-9	Isobenzane				
465-73-6	Isodrin				
34123-59-6	Isoproturon				
4234-79-1	Kelevan				
7439-92-1	Lead and its compounds	mg/kg	mg/kg	µg/l	kg/y
58-89-9	Lindane	µg/kg	µg/kg	ng/l	kg/y
330-55-2	Linuron			ng/l	
7439-96-5	Manganese and its compounds	µg/kg	mg/kg	µg/l	
7439-97-6	Mercury and its compounds	µg/kg	µg/kg	µg/l	kg/y
72-43-5	Methoxychlor				
2385-85-5	Mirex				
7439-98-7	Molybdenum and its compounds				
4636-83-3	Morfamquat				
81-15-2	Musk xylene				
70776-03-3	Naphthalene, chloro derivs.		µg/kg		
7440-02-0	Nickel and its compounds	mg/kg	mg/kg	µg/l	kg/y
1836-75-5	Nitrophen				
9016-45-9	nonyl phenol ethoxylate				
25154-52-3	Nonylphenols				
2234-13-1	Octachloronaphthalene				
GM	PAH (sum of 16 samples)				
140-66-9	para-tert-octylphenol				
	PCB Congeners IUPAC Nos 28, 52, 101, 118, 138, 153, 180	µg/kg	µg/kg		kg/y
85-22-3	Pentabromoethylbenzene				
1825-21-4	Pentachloroanisole				
608-93-5	Pentachlorobenzene				
16478-18-5	Pentachloriodobenzene				
1321-64-8	Pentachloronaphthalene				
87-86-5	Pentachlorophenol				
85-01-8	Phenantrene		µg/kg	ng/l	
64743-03-9	Phenols			ng/l	ktonnes/y
1336-36-3	Polychlorinated biphenyls	µg/kg	µg/kg		
	Polychlorinated dibenzodioxins (PCDD)				
136677-10-6	Polychlorinated dibenzofurans (PCDF)				
129-00-0	Pyrene		µg/kg	ng/l	
82-68-8	Quintozene				
	Radionuclides				Bq

CASNo	Determinand	Applied units			
		Biota	Sediment	Water	Loads
7782-49-2	Selenium and its compounds				
122-34-9	Simazine				
GM	Sum Chrysene+Triphenylene				
GM	Sum of (DDT (p,p'), DDE (p,p'), DDD (p,p'), DDT (o,p'), DDE (o,p'), DDD (o,p'))				
GM	Sum PAH				
GM	Sum PCB				
GM	Sum PCB7				
GM	Sum. PAH exkl. Bicykl.				
79-94-7	Tetrabromobisphenol A (TBBP-A)				
1335-88-2	Tetrachloronaphthalene				
2227-13-6	Tetrasul				
7440-31-5	Tin and its compounds		mg/kg		
	Total PCBs				tonnes/y
8001-35-2	Toxaphene				
39765-80-5	trans-Nonachlor				
56573-85-4	Tributyltin				
688-73-3	Tributyltin compounds	µg/kg	µg/kg		
12002-48-1	Trichlorobenzenes				
67-66-3	Trichloromethane				
1321-65-9	Trichloronaphthalene				
1582-09-8	Trifluralin				
603-35-0	Triphenyl phosphine				
10028-17-8	Tritium				Bq/y
7440-33-7	Tungsten and its compounds				
7440-62-2	Vanadium and its compound		mg/kg		
51000-52-3	Vinyl neodecanoate				
7440-66-6	Zinc and its compounds	mg/kg	mg/kg	µg/l	kg/y