EN Standards

EN 12673

Water quality - Gas chromatographic determination of some selected chlorophenols in water

This European Standard describes the gas chromatographic determination of 19 chlorophenols (2-, 3-, and 4-chlorophenol, 2,3-, 2,4-, 2,5-, 2,6-, 3,4- and 3,5-dichlorophenol, 2,3,4-, 2,3,5-, 2,3,6-, 2,4,5-, 2,4,6- and 3,4,5-trichlorophenol, 2,3,4,5-, 2,3,4,6-, and 2,3,5,6-tetrachlorophenol and pentachlorophenol) in drinking water, groundwater, rainwater, waste water, sea water and surface water.

Internal Standard Solution - 1 component

Solvent : Ethanol

2,4-Dibromophenol	CAS:615-58-7	ampoule 1 ml	1 000 µg/ml	Ref : F131331	Price : BJ
2,6-Dibromophenol	CAS:608-33-3	ampoule 1 ml	1 000 µg/ml	Ref : F131341	Price : BH
2,3,6-Trichlorophenol	CAS:933-75-5	ampoule 1 ml	1 000 µg/ml	Ref : F131351	Price : BH
2,4,6-Tribromophenol	CAS:118-79-6	ampoule 1 ml	1 000 µg/ml	Ref : F131361	Price : BK

Phenols Standard Solution - 19 components

2-Chlorophenol	CAS:95-57-8	3000 µg/l	2,3,4,5-Tetrachlorophenol acetate	id : 14700	200 µg/l
3-Chlorophenol	CAS:108-43-0	3000 µg/l	2,3,4,6-Tetrachlorophenol acetate	id : 14 720	200 µg/l
4-Chlorophenol	CAS:106-48-9	3000 µg/l	2,3,5,6-Tetrachlorophenol acetate	id : 14730	200 µg/l
2,3-Dichlorophenol	CAS:576-24-9	400 µg/l	2,3,4-Trichlorophenol acetate	id : 15561	300 µg/l
2,4-Dichlorophenol	CAS:120-83-2	400 µg/l	2,3,5-Trichlorophenol acetate	CAS:61925-88-0	300 µg/l
2,5-Dichlorophenol	CAS:583-78-8	400 µg/l	2,3,6-Trichlorophenol acetate	CAS:61925-87-9	300 µg/l
2,6-Dichlorophenol	CAS:87-65-0	400 µg/l	2,4,5-Trichlorophenol acetate	CAS:5393-75-9	300 µg/l
3,4-Dichlorophenol	CAS:95-77-2	400 µg/l	2,4,6-Trichlorophenol acetate	CAS:23399-90-8	300 µg/l
3,5-Dichlorophenol	CAS:591-35-5	400 µg/l	3,4,5-Trichlorophenol acetate	id : 15591	300 µg/l
Pentachlorophenol	CAS:87-86-5	100 µg/l			

Solvent : Ethanol — ampoule 1 ml — Ref : F131321 — Price : BCA

EN 12766

Petroleum products and used oils - Determination of PCBs and related products

The document specifies a method for the determination of the content of PCB congeners in petroleum products by gas chromatography using an electron capture detector.

PCBs Standard Solution - 1 component

Solvent : Iso-octane

PCB 30	CAS:35693-92-6	ampoule 1 ml	10 µg/ml	Ref : F131480	Price : BG
PCB 209	CAS:2051-24-3	ampoule 1 ml	10 µg/ml	Ref : F131500	Price : BG

PCBs Standard Solution - 8 components

PCB 1	CAS:2051-60-7	PCB 47	CAS:2437-79-8	PCB 171	CAS:52663-71-5
PCB 5	CAS:16605-91-7	PCB 89	CAS:73575-57-2	PCB 200	CAS:40186-71-8
PCB 29	CAS:15862-07-4	PCB 154	CAS:60145-22-4		

Solvent : Acetone — ampoule 1 ml — 100 µg/ml — Ref : F127921 — Price : JJ

Quality Control Mix – 5 components

Arochlor 1242	CAS : 53469-21-9	0.50 µg/l	PCB 30	CAS : 35693-92-6	0.02 µg /l
Arochlor 1254	CAS : 11097-69-1	0.25 µg/l	PCB 209	CAS : 2051-24-3	0.02 µg /l
Arochlor 1260	CAS : 11096-82-5	0.25 µg/l			

Solvent : Iso-Octane — ampoule 1 ml — Ref : F131520 — Price : EA

Calibration Mixture without PCB 170 – 13 components

PCB 18	CAS:37680-65-2	PCB 101	CAS:37680-73-2	PCB180	CAS:35065-29-3
PCB 28	CAS:7012-37-5	PCB 118	CAS:31508-00-6	PCB194	CAS:35694-08-7
PCB 31	CAS:16606-02-3	PCB 138	CAS:35065-28-2	PCB 209	CAS:2051-24-3
PCB 44	CAS:41464-39-5	PCB 149	CAS:38380-04-0		
PCB 52	CAS:35693-99-3	PCB 153	CAS:35065-27-1		

Solvent : Iso-Octane — ampoule 1 ml — 10 µg/ml — Ref : F131470 — Price : JA

PCBs Calibration Mixture - 14 components

PCB 18	CAS:37680-65-2	PCB 101	CAS:37680-73-2	PCB 170	CAS:35065-30-6
PCB 28	CAS:7012-37-5	PCB 118	CAS:31508-00-6	PCB 180	CAS:35065-29-3
PCB 31	CAS:16606-02-3	PCB 138	CAS:35065-28-2	PCB 194	CAS:35694-08-7
PCB 44	CAS:41464-39-5	PCB 149	CAS:38380-04-0	PCB 209	CAS:2051-24-3
PCB 52	CAS:35693-99-3	PCB 153	CAS:35065-27-1		

Solvent : Iso-Octane — ampoule 1 ml — 10 µg/ml — Ref : F127901 — Price : JC

EN 12916

Petroleum products - Determination of aromatic hydrocarbon types in middle distillates - High performance liquid chromatography method with refractive index detection

This European Standard specifies a test method for the determination of the content of mono-aromatic, di-aromatic and tri+-aromatic hydrocarbons in diesel fuels that may contain fatty acid methyl esters (FAME) up to 5 % (V/V) and petroleum distillates in the boiling range from 150 B°C to 400 B°C.

System Calibration Standard 1 - 7 components

Cyclohexane	CAS:110-82-7	1.00 % w/v	9-Methylanthracene	CAS:779-02-2	0.05 % w/v
Dibenzothiophene	CAS:132-65-0	0.05 % w/v	Naphthalene	CAS:91-20-3	0.01 % w/v
1,2-Dimethylbenzene	CAS:95-47-6	0.50 % w/v	1-Phenyldodecane	CAS:123-01-3	0.10 % w/v
Hexamethylbenzene	CAS:87-85-4	0.01 % w/v			

Solvent : n-Heptane — ampoule 5 ml — Ref : F110101 — Price : EF

EN 12918

Water quality - Determination of parathion, parathion-methyl and some other organophosphorus compounds in water by dichloromethane extraction and gas chromatographic analysis

This European Standard specifies the extraction processes and gas chromatographic (GC) methods for determining parathion, parathion-methyl and some other organophosphorus compounds in drinking waters, surface waters and waste waters. This standard may also be suitable for the determination of other organic compounds. The range is dependent on the compound and the source of water and is typically up to 1 ug/l with a reporting limit of 0,001 ug/l for drinking waters involving a 1 000 to 1 extraction ratio.

OPP Standard Solution - 19 components

Azinphos-ethyl	CAS:2642-71-9	Dichlorvos	CAS:62-73-7	Parathion-methyl	CAS:298-00-0
Azinphos-methyl	CAS:86-50-0	Dimethoate	CAS:60-51-5	Phosalone	CAS:2310-17-0
Bromophos	CAS:2104-96-3	Fenitrothion	CAS:122-14-5	Propetamphos	CAS:31218-83-4
Chlorfenvinphos	CAS:470-90-6	Fenthion	CAS:55-38-9	Triadimefon	CAS:43121-43-3
Chlorpyrifos-ethyl	CAS:2921-88-2	Malathion	CAS:121-75-5	Triazophos	CAS:24017-47-8
Chlorpyrifos methyl	CAS:5598-13-0	Mevinphos	CAS:7786-34-7		
Diazinon	CAS:333-41-5	Parathion-ethyl	CAS:56-38-2		

Solvent : Acetone — ampoule 1 ml — 100 µg/ml — Ref : F128951 — Price : GF

Solvent : Methanol purge & trap — ampoule 10 ml — 10 µg/ml — Ref : F131371 — Price : GF

EN 13628

Packaging - Flexible packaging material - Determination of residual solvents by static headspace gas chromatography - Part 2: Industrial methods

This part 2 should be read in conjunction with prEN (261190) part 1 and describes rapid methods as commonly used in quality control for example for monitoring the level of residual solvents used in the production of flexible packaging by static headspace chromatography. The procedure described in this part involves one single injection of the headspace which implies an incomplete extraction of the solvent. The values obtained may be lower than the absolute content which should be determined according to Part 1. During the analysis there may be interferences from possible products of thermal decomposition.

VOC Standard Solution - 10 components

Acetic acid-isobutyl ester	CAS:110-19-0	Ethyl Acetate	CAS:141-78-6	Trichloroethene	CAS:79-01-6
Acetone	CAS:67-64-1	Methanol	CAS:67-56-1	Xylenes	CAS:1330-20-7
1-Butanol	CAS:71-36-3	Methylisobutylketone	CAS:108-10-1		
Ethanol	CAS:64-17-5	Toluene	CAS:108-88-3		

Solvent : Iso-Octane — ampoule 1 ml — 200 µg/ml — Ref : F129221 — Price : CJ

EN 14039

Characterization of waste - Determination of hydrocarbon content in the range of C10 to C40 by gas chromatography

This document specifies a method for the quantitative determination of the hydrocarbon content (C10 to C40) in solid waste by gas chromatography.

It is applicable to hydrocarbon content between 100 mg/kg and 10 000 mg/kg expressed as dry matter basis.

Using this standard all hydrocarbons with a boiling range of approximately 175 B°C to 525 B°C, e.g. n-alkanes from C10H22 to C40H82, isoalkanes, cycloalkanes, alkyl benzenes, alkyl naphthalenes and polycyclic aromatic compounds are determined as hydrocarbons, provided they do not adsorb on the Florisil column during clean-up.

n-Alkane Standard Solution - 16 components C10÷C40 (all even)

n-Decane (C10)	CAS:124-18-5	n-Docosane (C22)	CAS:629-97-0	n-Tetratriacontane (C34)	CAS:14167-59-0
n-Dodecane (C12)	CAS:112-40-3	n-Tetracosane (C24)	CAS:646-31-1	n-Hexatriacontane (C36)	CAS:630-06-8
n-Tetradecane (C14)	CAS:629-59-4	n-Hexacosane (C26)	CAS:630-01-3	n-Octatriacontane (C38)	CAS:7194-85-6
n-Hexadecane (C16)	CAS:544-76-3	n-Octacosane (C28)	CAS:630-02-4	n-Tetracontane (C40)	CAS:4181-95-7
n-Octadecane (C18)	CAS:593-45-3	n-Triacontane (C30)	CAS:638-68-6		
n-Eicosane (C20)	CAS:112-95-8	n-Dotriacontane (C32)	CAS:544-85-4		

Solvent : n-Hexane — ampoule 1 ml — 50 µg/ml — Ref : F062145 — Price : GA

ampoule 5 ml — 50 µg/ml — Ref : F109781 — Price : BGA

Standard Solution - 22 components

Bromobenzene	CAS:108-86-1	1,3-Dichlorobenzene	CAS:541-73-1	1,2,3-Trichlorobenzene	CAS:87-61-6
n-Butylbenzene	CAS:104-51-8	1,4-Dichlorobenzene	CAS:106-46-7	1,2,4-Trichlorobenzene	CAS:120-82-1
sec-Butylbenzene	CAS:135-98-8	Hexachlorobutadiene	CAS:87-68-3	1,3,5-Trichlorobenzene	CAS:108-70-3
tert-Butylbenzene	CAS:98-06-6	Isopropylbenzene	CAS:98-82-8	1,2,3-Trichloropropane	CAS:96-18-4
2-Chlorotoluene	CAS:95-49-8	4-Isopropyltoluene	CAS:99-87-6	1,2,4-Trimethylbenzene	CAS:95-63-6
4-Chlorotoluene	CAS:106-43-4	Naphthalene	CAS:91-20-3	1,3,5-Trimethylbenzene	CAS:108-67-8
1,2-Dibromo-3-chloropropane	CAS:96-12-8	n-Propylbenzene	CAS:103-65-1		
1,2-Dichlorobenzene	CAS:95-50-1	1,1,2,2-Tetrabromoethane	CAS:79-27-6		

Solvent : Methanol purge & trap

ampoule 1 ml	2 000 µg/ml	Ref : F062155	Price : DF
ampoule 5 ml	2 000 µg/ml	Ref : F109991	Price : BDA

EN 15308 :2008

Characterization of waste - Determination of selected polychlorinated biphenyls (PCB) in solid waste by using capillary gas chromatography with electron capture or mass spectrometric detection

This document specifies a method for quantitative determination of seven polychlorinated biphenyl congeners (PCB-28, PCB-52, PCB-101, PCB-118, PCB-138, PCB-153 and PCB-180) in solid waste using high-resolution gas chromatography with electron capture or mass spectrometric detection.

Internal and injection Standard - 1 component

Solvent : n-Hexane

PCB 29	CAS:15862-07-4	ampoule 1 ml	400 µg/ml	Ref : F131401	Price : CE
PCB 30	CAS:35693-92-6	ampoule 1 ml	400 µg/ml	Ref : F131411	Price : BG
PCB 143	CAS:68194-15-0	ampoule 1 ml	400 µg/ml	Ref : F131421	Price : FA
PCB 155	CAS:33979-03-2	ampoule 1 ml	400 µg/ml	Ref : F131431	Price : CE
PCB 198	CAS:68194-17-2	ampoule 1 ml	400 µg/ml	Ref : F131441	Price : EA
PCB 207	CAS:52663-79-3	ampoule 1 ml	400 µg/ml	Ref : F131451	Price : FA
PCB 209	CAS:2051-24-3	ampoule 1 ml	400 µg/ml	Ref : F131461	Price : BG

PCBs Standard Solution - 7 components

PCB 28	CAS:7012-37-5	PCB 118	CAS:31508-00-6	PCB 180	CAS:35065-29-3
PCB 52	CAS:35693-99-3	PCB 138	CAS:35065-28-2		
PCB 101	CAS:37680-73-2	PCB 153	CAS:35065-27-1		

Solvent : n-Pentane

ampoule 1 ml	100 µg/ml	Ref : F131391	Price : GA

EN 61619

Insulating liquids - Contamination by polychlorinated biphenyls (PCBs) - Method of determination by capillary column gas chromatography (IEC 61619:1997)

Specifies a method for the determination of polychlorinated biphenyl (PCB) concentration in non-halogenated insulating liquids by high-resolution capillary column gas chromatography using an electron capture detector (ECD). Gives total PCB content; especially useful when a detailed analysis of PCB congeners is necessary.

Calibration PCB Solution - 14 components

PCB 18	CAS:37680-65-2	PCB 101	CAS:37680-73-2	PCB 170	CAS:35065-30-6
PCB 28	CAS:7012-37-5	PCB 118	CAS:31508-00-6	PCB 180	CAS:35065-29-3
PCB 31	CAS:16606-02-3	PCB 138	CAS:35065-28-2	PCB 194	CAS:35694-08-7
PCB 44	CAS:41464-39-5	PCB 149	CAS:38380-04-0	PCB 209	CAS:2051-24-3
PCB 52	CAS:35693-99-3	PCB 153	CAS:35065-27-1		

Solvent : Iso-Octane

ampoule 1 ml	10 µg/ml	Ref : F127901	Price : JC