

The logo for CPAchem, featuring the text 'CPAchem' in a white, sans-serif font. The 'CPA' is in a larger, bold font, and 'chem' is in a smaller font. The text is set against a white, swoosh-like background that tapers to the left and right, all on an orange background.

*The Experts in Custom-made Standards -  
Organic & Inorganic*

# ORGANIC STANDARDS - Book 1

ISO and EN Methods  
European and US  
Pharmacopoeia methods  
International Regulations

in Certified Reference Materials production (Custom and Stock) with both ISO Guide 34 and ISO/IEC 17025 accreditations.

The four secrets of our success are:

- ✓ High-technology
- ✓ High-experienced staff
- ✓ High-quality
- ✓ High-speed

## Our scope

### Organic Certified Reference Materials (CRMs)

**Stock and Custom-made solutions and substances for GC/GC-MS, HPLC/HPLC-MS:**

#### *Stock solutions*

- Single and Multi-component solutions;
- According to ISO, EN, International Regulations, European and US Pharmacopoeia methods, ASTM and EPA Methods, etc.
- Contaminant standards.

#### *Custom-made solutions*

CPAchem Ltd. is a world leader in manufacturing of custom reference solutions, prepared to specific customer requirements.

CPAchem's team has gained enormous experience and knowledge on how to prepare custom organic solutions in order to satisfy even the most extraordinary clients' needs.

The lead time - 2 to 5 days. Emergency orders within 24 hours.

Flexibility, saving time, money and efforts.

#### *Synthesis*

CPAchem is in the process of completing the range of Polybrominated diphenyl ethers (BDE).

CPAchem has entered the market with more than thousand new organic substances, most of which do not have a CRM substitute.

## Inorganic Certified Reference Materials (CRMs)

Custom-made and Stock Inorganic solutions - AAS, ICP and ICP/MS, Ion Chromatography:

- Single and Multi-element
- AAS and ICP Modifiers, Buffers and Reagents
- IC Eluent concentrates

## Volumetric and buffers Volumetric and buffers Certified Reference Materials (CRMs)

Custom-made and Stock Volumetric solutions

Custom-made and Stock pH and conductivity buffers. Primary pH buffers (Harned Cell)

## Pharmacopoeia products

Products according to the European, US, British, Indian, Japanese, and International Pharmacopoeias

## What makes us different?

**Our specially developed Computer Aided Manufacturing (CAM) software, in addition to the modern network SQL -based data collecting system controls all internal processes:**

- ✓ Automated calculations;
- ✓ Barcode-driven movement;
- ✓ Computer control of balances and other hardware;
- ✓ Incoming control of the raw materials;
- ✓ Manufacturing and control of the intermediate solutions (bulks);
- ✓ Preparation of a custom-made solution (the program determines the needed weights and controls the gravimetric process on the analytical balances).
- ✓ Control of the final product (instrumental or classical);
- ✓ Evaluating the final data and calculating the certified values and uncertainties;
- ✓ Automatic printing of labels, certificates and MSDS;
- ✓ Automatic printing of Delivery Notes and e-mailing tracking numbers to clients.

# Quality Certification and Accreditation

We are an accredited Certified Reference Materials producer (ISO Guide 34) and an accredited testing laboratory (ISO/IEC 17025) - both accreditations by ANSI-ASQ National Accreditation Board - ANAB.

From the beginning of 2016 CPAchem Ltd. has been accredited as a Proficiency Testing Provider - ISO/IEC 17043:2010.

CPAchem's Quality Management System has been approved by Lloyds Register Quality Assurance to ISO 9001:2008 since 2001.

## CRM Certification

The Certificates of analysis of organic CRM are designed and the certified value(s) and uncertainty(ies) are determined in accordance with ISO Guide 31, ISO Guide 35.

The CoAs provide full traceability. The dissolution of the raw materials (with their purity), passing through the preparation of the intermediate solutions and reaching to the preparation of the final solutions is described in section Additional Information. The uncertainties refer to each of the components separately and not to the uncertainty of the mixture.

**CERTIFIED REFERENCE MATERIAL**  
**Organic Standard Solution**

This document is designed and the certified value(s) and uncertainty(ies) are determined in accordance with ISO Guide 31<sup>TM</sup>, ISO Guide 34<sup>TM</sup> and Eurachem / CITAC Guides<sup>TM</sup>

Lot N: C41800      Batch Number (Barcode): 92238930      Certification Date: 10.11.2015  
Date of stability last check:

**Description of the Reference Material (CRM):**      **Solution of PAH Standard Solution - 16 components; 2000mg/l each of**  
Acenaphthene [CAS:83-32-9]; Acenaphthylene [CAS:208-96-8];  
Anthracene [CAS:120-12-7]; Benzo(a)anthracene [CAS:56-55-3];  
Benzo(a)pyrene [CAS:50-32-8]; Benzo(b)fluoranthene [CAS:205-99-2];  
Benzo(k)fluoranthene [CAS:191-24-2]; Benzo(e)fluoranthene [CAS:207-08-9];  
Benzo(g,h,i)perylene [CAS:191-24-2]; Chrysene [CAS:218-01-9]; Dibenz(a,h)anthracene [CAS:207-08-9];  
Fluoranthene [CAS:206-44-0]; Fluorene [CAS:86-73-7];  
Indeno(1,2,3-c,d)pyrene [CAS:193-39-8]; Naphthalene [CAS:91-20-3];  
Phenanthrene [CAS:85-01-8]; Pyrene [CAS:129-00-0] in Acetonitrile  
Storage conditions: To be stored in a refrigerator at temperature below 4°C




Ref N: F128611

Certified value/ Uncertainty:	Component	Chem. Formula	CAS No.	Certified Value / Uncertainty (mg/l) <sup>a</sup>
	Acenaphthene	C <sub>16</sub> H <sub>10</sub>	83-32-9	1995.0 ± 27.9
	Acenaphthylene	C <sub>16</sub> H <sub>8</sub>	208-96-8	2002.9 ± 26.0
	Anthracene	C <sub>14</sub> H <sub>10</sub>	120-12-7	1995.0 ± 27.9
	Benzo(a)anthracene	C <sub>18</sub> H <sub>12</sub>	56-55-3	1995.0 ± 26.1
	Benzo(a)pyrene	C <sub>20</sub> H <sub>12</sub>	50-32-8	2003.9 ± 26.8
	Benzo(b)fluoranthene	C <sub>18</sub> H <sub>12</sub>	205-99-2	1999.0 ± 26.7
	Benzo(k)fluoranthene	C <sub>18</sub> H <sub>12</sub>	191-24-2	1997.9 ± 27.9
	Benzo(e)fluoranthene	C <sub>18</sub> H <sub>12</sub>	207-08-9	2002.9 ± 26.3
	Benzo(g,h,i)perylene	C <sub>24</sub> H <sub>14</sub>	218-01-9	2007.6 ± 28.0
	Chrysene	C <sub>18</sub> H <sub>12</sub>	53-75-3	2007.7 ± 28.0
	Dibenz(a,h)anthracene	C <sub>22</sub> H <sub>14</sub>	206-44-0	1999.0 ± 27.8
	Fluorene	C <sub>16</sub> H <sub>12</sub>	86-73-7	1998.8 ± 26.3
	Indeno(1,2,3-c,d)pyrene	C <sub>22</sub> H <sub>14</sub>	193-39-8	2009.9 ± 26.7
	Naphthalene	C <sub>10</sub> H <sub>8</sub>	91-20-3	2013.9 ± 26.5
	Phenanthrene	C <sub>14</sub> H <sub>10</sub>	85-01-8	2001.6 ± 26.3
	Pyrene	C <sub>16</sub> H <sub>10</sub>	129-00-0	2002.5 ± 27.9

**Concept of Certification and traceability statement:**  
This certified reference material is produced by gravimetric measurement and dissolving the individual substances in Acetonitrile.

**Method of certification:** CRM's calibration procedure (WQP 5.15.1/2)  
The certified value was obtained gravimetrically and confirmed experimentally by GC/MS or HPLC.

The reported expanded uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor  $k = 2$ , which for a normal distribution corresponds to a coverage probability of approximately 95%. The standard uncertainty of measurement has been determined in accordance with EA 402 and incorporates the uncertainties of the raw material purity, the mass and the volume. Property of the result of a measurement whereby it can be related to stated references, usually national or international standards, through an unbroken chain of comparisons all having stated uncertainties (ISO VIM<sup>®</sup>). The metrological traceability is assured through gravimetric measurement and dissolving the certified reference material from accredited according to ISO/IEC 17025<sup>®</sup> and/or ISO Guide 34<sup>®</sup>. The reference laboratories/producers are traceable to SI. All analytical balances used for the preparation of the solution are calibrated yearly under an in-house procedure with class E1 and class E2 analytical weights, traceable to SI (DKZ) and are daily checked. Class A laboratory glassware is used. The thermometers used for solution's temperature measurement are traceable to SI. The results from temperature measurement are traceable to SI.

CPAchem Ltd is accredited to ISO Guide 34 and ISO/IEC 17025

calibration are calibrated from an ISO 17025 accredited laboratory. The ambient conditions are controlled with a hygrometer calibrated from an ISO 17025 accredited laboratory.  
Both, purity of the starting materials and solvent were checked using appropriate analytical instrument.

**Starting material, purity (Lot N):**

Acenaphthene	99.5% (41131220)
Acenaphthylene	91.5% (41179642)
Anthracene	99.5% (41132784)
Benzo(a)anthracene	98.3% (41131350)
Benzo(a)pyrene	99.4% (41180051)
Benzo(b)fluoranthene	99.8% (41179482)
Benzo(g,h,i)perylene	99.3% (41180242)
Benzo(k)fluoranthene	99.3% (41178164)
Chrysene	98.7% (41182765)
Dibenzo(a,h)anthracene	99% (41178850)
Fluoranthene	99.3% (41089675)
Fluorene	95% (41059357)
Indeno(1,2,3-c,d)pyrene	98.6% (41180631)
Naphthalene	99.7% (41179710)
Phenanthrene	98.6% (41176481)
Pyrene	98.5% (41099001)

**Density:** 0.9356 g/cm<sup>3</sup> at 21.3 °C

**Expiry date:** until 12.2017

**Intended use:**

**For Laboratory Use Only**

This CRM is intended for:

- Calibration of TLC, GC/FID, GC/TCD, GC/ECD, GC/MS, GC/MS/MS, LC/UV, LC/MS and LC/MS/MS
- Validation of analytical methods
- Preparation of "working reference samples"
- Detection limit and linearity studies

This statement is not intended to restrict the use for other purposes.

**Instructions for the correct use of this reference material:**

This certified reference material can be used directly or can be diluted in an appropriate solvent. Only a clean class A glassware should be used. Do not pipet from container. Obtained concentration (in mg/l) after dilution is a result from the multiplication of certified value of CRM concentration and the CRM's volume used for dilution and divided into the flask's volume used for dilution.

**Stability and storage:**

This CRM is with a guaranteed stability until ±5% of the certified concentration for a period of 24 months. Stability is guaranteed of an unopened ampoule stored in a refrigerator at temperature 4°C or below. Product should be used shortly after opening to avoid concentration changes due to evaporation. Warranty does not apply to ampoules stored after opening.

**Hazardous situation:**

The normal laboratory safety precautions should be observed when working with this RM. Further details for the handling of this RM are available as safety data sheet.

**Level of homogeneity**

This solution was mixed according to an in-house procedure (OQP 5.13.1) and is guaranteed to be homogeneous.

To ensure sufficient homogeneity of the sample prior to use thoroughly mix by inversion or sonicate.

This Certified Reference Material was produced under a quality management system that is:

- Registered to ISO 9001 Quality Management System (Lloyd's Register Quality Assurance Ltd Cert No SOF0368072)
- Accredited according to ISO/IEC 17025 – Testing (ANAB Cert No AT-1836)
- Accredited according to ISO Guide 34 - Reference Material Producer (ANAB Cert No AR-1835)

**Names of certifying officers:**

Laboratory: Yordan Uzunov

Manager: Krassimira Taralova

*\*This certificate has been computer generated and does not signated*

## Additional Information Gravimetric Data

Component	Purity %	Source Lot No	Weighed quantity, g	Final quantity, kg.10 <sup>-3</sup>	Bulk/ Standard Solution lot No	Concen- tration mg/kg	Chemist ID
Acenaphthene	99.5	41131220	0.02005	9.3564	92238930	2132.21	VV
Acenaphthylene	91.5	41179642	0.02189	9.3564	92238930	2140.72	VV
Anthracene	99.5	41132784	0.02005	9.3564	92238930	2132.21	VV
Benzo(a)anthracene	98.3	41131350	0.02021	9.3564	92238930	2123.30	VV
Benzo(a)pyrene	99.4	41180051	0.02016	9.3564	92238930	2141.74	VV
Benzo(b)fluoranthene	99.8	41179482	0.01993	9.3564	92238930	2125.83	VV
Benzo(g,h,i)perylene	99.3	41180242	0.02012	9.3564	92238930	2135.35	VV
Benzo(k)fluoranthene	99.3	41178164	0.02015	9.3564	92238930	2138.54	VV
Chrysene	98.7	41182765	0.02034	9.3564	92238930	2145.65	VV
Dibenzo(a,h)anthracene	99	41178850	0.02028	9.3564	92238930	2145.83	VV
Fluoranthene	99.3	41089675	0.02003	9.3564	92238930	2125.80	VV
Fluorene	95	41059357	0.02104	9.3564	92238930	2136.29	VV
Indeno(1,2,3-c,d)pyrene	98.6	41180631	0.02038	9.3564	92238930	2147.70	VV
Naphthalene	99.7	41179710	0.02025	9.3564	92238930	2157.81	VV
Phenanthrene	98.6	41176481	0.0203	9.3564	92238930	2139.26	VV
Pyrene	98.5	41099001	0.02033	9.3564	92238930	2140.26	VV

# Packaging information

## Ampoule

1 ml - 2 ml  
5 ml - 10 ml



## Certain bottle

1, 5 ml - 4,5 ml - 10 ml



## Amber bottle

20 ml



# Search Engine

This catalogue contains only a part of our stock products.

In order to find the full list of our products, CPChem Ltd. recommends you to use our most sophisticated search engine.

It allows a user-friendly search among thousands of single and multi-component organic stock products.



Select Component

Type CAS number or Name of the Component

† Type Name or CAS of the Component for suggestions or click the button to select from list and add as filter

Clear Filter 1 Component as Filter

The suggested concentrations belong to the catalogue products

100 ug/ml Atrazine [1912-24-9]

Click on red button to remove component filter

12 Organic Products by Selected Component [Make Custom Request](#)

Add a product from filtered components or Use the button above to define what components to be included in the product you are looking for!

Ref No	Vol.	Product Name	Crit	Pr.EUR
Filter	Filter	Filter	Filter	
P804970	1 ml	Atrazine [CAS:1912-24-9] 100 ug/ml in Acetone	2	17.00
P804990	1 ml	Atrazine [CAS:1912-24-9] 100 ug/ml in Acetonitr.	2	17.00
P805010	1 ml	Atrazine [CAS:1912-24-9] 100 ug/ml in Cyclohexa...	2	17.00
F890241	1 ml	Pesticide-Mix - 6 components; 100ug/ml each of A...	7	35.00
F119171	1 ml	NCC Standard Solution 8 components (EPA 505)100ug...	9	65.00
F115751	1 ml	NCC Standard Solution - 11 components (EPA 619)10...	12	40.00
F872031	1 ml	Method DM 471 Pesticide Standard - 15 components;...	16	46.00

Description

100 ug/ml [1912-24-9] Atrazine  
1 part [110-82-7] Cyclohexane

# Quotation request form

If there isn't a stock product matching your needs, you can make a custom request at:  
[www.cpachem.com/custom/organic](http://www.cpachem.com/custom/organic)

# Contents

CPAChem's ORGANIC CATALOGUE contains the following four books:

1. **ORGANIC STANDARDS – Book 1 - ISO, European and US Pharmacopoeia methods, EN Methods and International Regulations**
2. ORGANIC STANDARDS – Book 2 - EPA & ASTM Methods
3. ORGANIC STANDARDS – Book 3 - CPAChem's Most Popular Organic Mixtures
4. ORGANIC STANDARDS – Book 4 - High-Purity Organic & Single-component solutions.

This edition contains a **selection of ISO, European and US Pharmacopoeia methods, EN Methods and International Regulations.**

The complete list of our thousands of stock products is available on CPAChem's website.

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# ISO Methods



# Animal and vegetable fats and oils

## Multiple compound standard solution 15 components (ISO 15753:2006)

Naphthalene	CAS:91-20-3	Fluoranthene	CAS:206-44-0	Benzo(k)fluoranthene	CAS:207-08-9
Acenaphthene	CAS:83-32-9	Pyrene	CAS:129-00-0	Benzo(a)pyrene	CAS:50-32-8
Fluorene	CAS:86-73-7	Benzo(a)anthracene	CAS:56-55-3	Dibenzo(a,h)anthracene	CAS:53-70-3
Phenanthrene	CAS:85-01-8	Chrysene	CAS:218-01-9	Benzo(g,h,i)perylene	CAS:191-24-2
Anthracene	CAS:120-12-7	Benzo(b)fluoranthene	CAS:205-99-2	Indeno(1,2,3-c,d)pyrene	CAS:193-39-5

**Solvent:** Toluene      **Volume:** ampoule 1 ml      **Concentration (ug/ml):** 100      **Ref.:** F110001

## ISO 22959: PAH Standard solution in toluene 17 components

Naphthalene	CAS:91-20-3	Fluoranthene	CAS:206-44-0	Benzo(a)pyrene	CAS:50-32-8
Acenaphthylene	CAS:208-96-8	Pyrene	CAS:129-00-0	Dibenzo(a,h)anthracene	CAS:53-70-3
Acenaphthene	CAS:83-32-9	Benzo(a)anthracene	CAS:56-55-3	Benzo(g,h,i)perylene	CAS:191-24-2
Fluorene	CAS:86-73-7	Chrysene	CAS:218-01-9	Indeno(1,2,3-c,d)pyrene	CAS:193-39-5
Phenanthrene	CAS:85-01-8	Benzo(b)fluoranthene	CAS:205-99-2	Coronene	CAS:191-07-1
Anthracene	CAS:120-12-7	Benzo(k)fluoranthene	CAS:207-08-9		

**Solvent:** Toluene      **Volume:** ampoule 1 ml      **Concentration (ug/ml):** 200      **Ref.:** F236664  
ampoule 10 ml      200      F236664.10

## Determination of caffeine

### ISO 20481: Caffeine stock solution

Caffeine      CAS:58-08-2

**Solvent:** Water      **Volume:** ampoule 100 ml      **Concentration (ug/ml):** 200      **Ref.:** F236924

## Petroleum Products

### ISO 3924 - Calibration Mixture 17 components

n-Pentane (C5)	CAS:109-66-0	n-Dodecane (C12)	CAS:112-40-3	n-Octacosane (C28)	CAS:630-02-4
n-Hexane (C6)	CAS:110-54-3	n-Tetradecane (C14)	CAS:629-59-4	n-Dotriacontane (C32)	CAS:544-85-4
n-Heptane (C7)	CAS:142-82-5	n-Hexadecane (C16)	CAS:544-76-3	n-Hexatriacontane (C36)	CAS:630-06-
n-Octane (C8)	CAS:111-65-9	n-Octadecane (C18)	CAS:593-45-3	n-Tetracontane (C40)	CAS:4181-95-7
n-Nonane (C9)	CAS:111-84-2	n-Eicosane (C20)	CAS:112-95-8	n-Tetratetracontane (C44)	CAS:7098-22-8
n-Decane (C10)	CAS:124-18-5	n-Tetracosane (C24)	CAS:646-31-1		

**Solvent:** Carbon disulfide      **Volume:** ampoule 1 ml      **Concentration:** 0.1% w/w      **Ref.:** F235964

### Calibration Mix Solution 2 - 20 components (ISO 3924)

n-Decane (C10)	CAS:124-18-5	n-Hexane (C6)	CAS:110-54-3	n-Pentane (C5)	CAS:109-66-0
n-Dodecane (C12)	CAS:112-40-3	n-Hexatriacontane (C36)	CAS:630-06-8	n-Tetracontane (C40)	CAS:4181-95-7
n-Dotriacontane (C32)	CAS:544-85-4	n-Nonane (C9)	CAS:111-84-2	n-Tetracosane (C24)	CAS:646-31-1
n-Eicosane (C20)	CAS:112-95-8	n-Octacosane (C28)	CAS:630-02-4	n-Tetradecane (C14)	CAS:629-59-4
n-Heptadecane (C17)	CAS:629-78-7	n-Octadecane (C18)	CAS:593-45-3	n-Tetratetracontane (C44)	CAS:7098-22-8
n-Heptane (C7)	CAS:142-82-5	n-Octane (C8)	CAS:111-65-9	n-Undecane (C11)	CAS:1120-21-4
n-Hexadecane (C16)	CAS:544-76-3	n-Pentadecane (C15)	CAS:629-62-9		

**Solvent:** Chloroform      **Volume:** ampoule 1 ml      **Concentration:** 0.1% w/w      **Ref.:** F110071



Find the full list of our stock products at [www.cpachem.com/organic](http://www.cpachem.com/organic)

# Soil Quality

## Multicomponent Stock Solution of PCBs and Organochlorine pesticides 24 components (ISO 10382:2002)

PCB 28	CAS:7012-37-5	Alpha-HCH	CAS:319-84-6	Heptachlor-exo-epoxide	CAS:1024-57-3
PCB 52	CAS:35693-99-3	Beta-HCH	CAS:319-85-7	Endosulfan-alpha	CAS:959-98-8
PCB 101	CAS:37680-73-2	Gamma-HCH (Lindane)	CAS:58-89-9	4,4'-DDE	CAS:72-55-9
PCB 118	CAS:31508-00-6	Aldrin	CAS:309-00-2	2,4'-DDD	CAS:53-19-0
PCB 138	CAS:35065-28-2	Dieldrin	CAS:60-57-1	2,4'-DDT	CAS:789-02-6
PCB 153	CAS:35065-27-1	Endrin	CAS:72-20-8	4,4'-DDD (TDE)	CAS:72-54-8
PCB 180	CAS:35065-29-3	Heptachlor	CAS:76-44-8	2,4'-DDE	CAS:3424-82-6
Hexachlorobenzene	CAS:118-74-1	Heptachlor-endo-epoxide	CAS:28044-83-9	4,4'-DDT	CAS:50-29-3

**Solvent:** Iso-octane      **Volume:** ampoule 1 ml      **Concentration (ug/ml):** 100      **Ref.:** F109841

## Multicomponent Stock Solution of PCBs - 7 components (ISO 10382:2002)

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

**Solvent:** Iso-octane      **Volume:** ampoule 1 ml      **Concentration (ug/ml):** 100      **Ref.:** F109831.1

## PAH Standard Solution - 16 components (ISO 13877)

Acenaphthene	CAS:83-32-9	Benzo(g,h,i)perylene	CAS:191-24-2	Indeno(1,2,3-c,d)pyrene	CAS:193-39-5
Acenaphthylene	CAS:208-96-8	Benzo(k)fluoranthene	CAS:207-08-9	Naphthalene	CAS:91-20-3
Anthracene	CAS:120-12-7	Chrysene	CAS:218-01-9	Phenanthrene	CAS:85-01-8
Benzo(a)anthracene	CAS:56-55-3	Dibenzo(a,h)anthracene	CAS:53-70-3	Pyrene	CAS:129-00-0
Benzo(a)pyrene	CAS:50-32-8	Fluoranthene	CAS:206-44-0		
Benzo(b)fluoranthene	CAS:205-99-2	Fluorene	CAS:86-73-7		

**Solvent:** Acetonitrile      **Volume:** ampoule 5 ml  
ampoule 1 ml      **Concentration (ug/ml):** 10  
100      **Ref.:** F109871  
F109861

## Chlorophenol Standard, Stock Solution 15 components (ISO 14154)

2,3-Dichlorophenol	CAS:576-24-9	400 ug/ml	2,3,6-Trichlorophenol	CAS:933-75-5	400 ug/ml
2,4-Dichlorophenol	CAS:120-83-2	400 ug/ml	2,4,5-Trichlorophenol	CAS:95-95-4	400 ug/ml
2,5-Dichlorophenol	CAS:583-78-8	400 ug/ml	2,4,6-Trichlorophenol	CAS:88-06-2	600 ug/ml
2,6-Dichlorophenol	CAS:87-65-0	400 ug/ml	3,4,5-Trichlorophenol	CAS:609-19-8	200 ug/ml
3,4-Dichlorophenol	CAS:95-77-2	400 ug/ml	2,3,4,5-Tetrachlorophenol	CAS:4901-51-3	200 ug/ml
3,5-Dichlorophenol	CAS:591-35-5	400 ug/ml	2,3,4,6-Tetrachlorophenol	CAS:58-90-2	600 ug/ml
2,3,4-Trichlorophenol	CAS:15950-66-0	400 ug/ml	Pentachlorophenol	CAS:87-86-5	1000 ug/ml
2,3,5-Trichlorophenol	CAS:933-78-8	400 ug/ml			

**Solvent:** Ethanol      **Volume:** ampoule 1 ml      **Ref.:** F109881

## ISO 15009 - Standard Stock Solution 26 components

Benzene	CAS:71-43-2	Chloroform	CAS:67-66-3	trans-1,3-Dichloropropene	CAS:10061-02-6
Toluene	CAS:108-88-3	Tetrachloroethane	CAS:56-23-5	cis-1,2-Dichloroethene	CAS:156-59-2
Ethylbenzene	CAS:100-41-4	1,1-Dichloroethane	CAS:75-34-3	trans-1,2-Dichloroethene	CAS:156-60-5
o-Xylene	CAS:95-47-6	1,2-Dichloroethane	CAS:107-06-2	3-Chloropropene	CAS:107-05-1
m-Xylene	CAS:108-38-3	Trichloroethene	CAS:79-01-6	1,1,1-Trichloroethane	CAS:71-55-6
p-Xylene	CAS:106-42-3	1,1,2-Trichloroethane	CAS:79-00-5	Tetrachloroethene	CAS:127-18-4
Styrene	CAS:100-42-5	1,2-Dichloropropane	CAS:78-87-5	Chlorobenzene	CAS:108-90-7
Naphthalene	CAS:91-20-3	1,2,3-Trichloropropane	CAS:96-18-4	1,2-Dichlorobenzene	CAS:95-50-1
Dichloromethane	CAS:75-09-2	cis-1,3-Dichloropropene	CAS:10061-01-5		

**Solvent:** Methanol (purge & trap)      **Volume:** ampoule 1 ml      **Concentration (ug/ml):** 4000      **Ref.:** F236074

**ACs Internal Stock Standard Solution 4 components (ISO 15680)**

Fluorobenzene	CAS:462-06-6	Monochlorobenzene D5	CAS:3114-55-4
1,4-Difluorobenzene	CAS:540-36-3	1,4-Dichlorobenzene D4	CAS:3855-82-1

**Solvent:** Methanol purge-and-trap    **Volume:** ampoule 5 ml    **Concentration (ug/ml):** 2000    **Ref.:** F109951

**PAH Standard Solution**

Acenaphthene	CAS:83-32-9	Benzo(g,h,i)perylene	CAS:191-24-2	Indeno(1,2,3-c,d)pyrene	CAS:193-39-5
Acenaphthylene	CAS:208-96-8	Benzo(k)fluoranthene	CAS:207-08-9	Naphthalene	CAS:91-20-3
Anthracene	CAS:120-12-7	Chrysene	CAS:218-01-9	Phenanthrene	CAS:85-01-8
Benzo(a)anthracene	CAS:56-55-3	Dibenzo(a,h)anthracene	CAS:53-70-3	Pyrene	CAS:129-00-0
Benzo(a)pyrene	CAS:50-32-8	Fluoranthene	CAS:206-44-0		
Benzo(b)fluoranthene	CAS:205-99-2	Fluorene	CAS:86-73-7		

**Solvent:** Cyclohexane    **Volume:** ampoule 1 ml    **Concentration (ug/ml):** 100    **Ref.:** F062135

## Water Quality

**OCs / PCBs / ACs Standard Solution 36 components (ISO 6468)**

Alpha-HCH	CAS:319-84-6	Dieldrin	CAS:60-57-1	Pentachlorobenzene	CAS:608-93-5
Beta-HCH	CAS:319-85-7	Endrin	CAS:72-20-8	Hexachlorobenzene	CAS:118-74-1
Gamma-HCH (Lindane)	CAS:58-89-9	Heptachlor	CAS:76-44-8	Quintozone (Pentachloronitrobenzene)	CAS:82-68-8
Delta-HCH	CAS:319-86-8	Heptachlor-endo-epoxide	CAS:28044-83-9	PCB 28	CAS:7012-37-5
epsilon-HCH	CAS:6108-10-7	Heptachlor-exo-epoxide	CAS:1024-57-3	PCB 52	CAS:35693-99-3
2,4'-DDE	CAS:3424-82-6	Endosulfan-alpha	CAS:959-98-8	PCB 101	CAS:37680-73-2
4,4'-DDE	CAS:72-55-9	Endosulfan-beta	CAS:33213-65-9	PCB 138	CAS:35065-28-2
2,4'-DDD (o,p'-TDE)	CAS:53-19-0	1,2,3-Trichlorobenzene	CAS:87-61-6	PCB 153	CAS:35065-27-1
4,4'-DDD (TDE)	CAS:72-54-8	1,2,4-Trichlorobenzene	CAS:120-82-1	PCB 180	CAS:35065-29-3
2,4'-DDT	CAS:789-02-6	1,3,5-Trichlorobenzene	CAS:108-70-3	PCB 194	CAS:35694-08-7
4,4'-DDT	CAS:50-29-3	1,2,3,4-Tetrachlorobenzene	CAS:634-66-2		
Methoxychlor (DMTD)	CAS:72-43-5	1,2,3,5-Tetrachlorobenzene	CAS:634-90-2		
Aldrin	CAS:309-00-2	1,2,4,5-Tetrachlorobenzene	CAS:95-94-3		

**Solvent:** Iso-octane    **Volume:** ampoule 1 ml    **Concentration (ug/ml):** 10    **Ref.:** F109230

**PAH Standard Solution 6 components (ISO 7981-1)**

Fluoranthene	CAS:206-44-0	10 ug/ml	Benzo(k)fluoranthene	CAS:207-08-9	2 ug/ml
Benzo(b)fluoranthene	CAS:205-99-2	2 ug/ml	Indeno(1,2,3-c,d)pyrene	CAS:193-39-5	2 ug/ml
Benzo(a)pyrene	CAS:50-32-8	2 ug/ml	Benzo(g,h,i)perylene	CAS:191-24-2	2 ug/ml

**Solvent:** Acetonitrile    **Volume:** ampoule 5 ml    **Ref.:** F109250

**PAH Standard Solution - 6 components (ISO 7981-2)**

Fluoranthene	CAS:206-44-0	Benzo(a)pyrene	CAS:50-32-8	Indeno(1,2,3-c,d)pyrene	CAS:193-39-5
Benzo(b)fluoranthene	CAS:205-99-2	Benzo(k)fluoranthene	CAS:207-08-9	Benzo(g,h,i)perylene	CAS:191-24-2

**Solvent:** Acetonitrile    **Volume:** ampoule 1 ml  
ampoule 5 ml    **Concentration (ug/ml):** 10  
10    **Ref.:** F868391  
F109260



### Phenols Standard Stock Solution 33 components (ISO 8165-1:1992)

Phenol	CAS:108-95-2	4-Chloro-2-methylphenol	CAS:1570-64-5	2,3,6-Trichlorophenol	CAS:933-75-5
2-Methylphenol	CAS:95-48-7	4-Chloro-3-methylphenol	CAS:59-50-7	2,3,4,5-Tetrachlorophenol	CAS:4901-51-3
3-Methylphenol	CAS:108-39-4	2,4-Dichloro-3,5-dimethylphenol	CAS:133-53-9	2,3,4,6-Tetrachlorophenol	CAS:58-90-2
4-Methylphenol	CAS:106-44-5	4-Chloro-2-isopropyl-5-methylphenol		2,3,5,6-Tetrachlorophenol	CAS:935-95-5
2,4-Dimethylphenol	CAS:105-67-9		CAS:89-68-9	Pentachlorophenol	CAS:87-86-5
4-Ethylphenol	CAS:123-07-9	2,3-Dichlorophenol	CAS:576-24-9	1-Naphthol	CAS:90-15-3
2,6-Di-tert-butyl-4-methylphenol	CAS:128-37-0	2,4-Dichlorophenol	CAS:120-83-2	2-Naphthol	CAS:135-19-3
2-Phenylphenol	CAS:90-43-7	2,5-Dichlorophenol	CAS:583-78-8	2-Chloro-5-methylphenol	CAS:615-74-7
2-Benzylphenol	CAS:28994-41-4	2,6-Dichlorophenol	CAS:87-65-0	4-tert-Butyl-2-chlorophenol	CAS:98-28-2
2-Chlorophenol	CAS:95-57-8	2,4,6-Trichlorophenol	CAS:88-06-2	2-Benzyl-4-chlorophenol	CAS:120-32-1
3-Chlorophenol	CAS:108-43-0	2,3,5-Trichlorophenol	CAS:933-78-8		
4-Chlorophenol	CAS:106-48-9	2,4,5-Trichlorophenol	CAS:95-95-4		

**Solvent:** Methanol      **Volume:** ampoule 1 ml      **Concentration (ug/ml):** 100      **Ref.:** F109270

### BTEX Standard Solution - 6 components (ISO 9377-2-Mod)

Benzene	CAS:71-43-2	Toluene	CAS:108-88-3	m-Xylene	CAS:108-38-3
Ethylbenzene	CAS:100-41-4	o-Xylene	CAS:95-47-6	p-Xylene	CAS:106-42-3

**Solvent:** n-Hexane      **Volume:** ampoule 1 ml      **Concentration (ug/ml):** 2000      **Ref.:** F109811.1

### Calibration Mixture of Mineral Oils (A+B) Set (ISO 9377-2-Mod)

Ampoule 1	Blank	n-Hexane		Ampoule 4	Mineral Oil CAS:8042-47-5 + Diesel Oil	0.6 mg/ml each
Ampoule 2	Mineral Oil	CAS:8042-47-5 + Diesel Oil	0.2 mg/ml each	Ampoule 5	Mineral Oil CAS:8042-47-5 + Diesel Oil	0.8 mg/ml each
Ampoule 3	Mineral Oil	CAS:8042-47-5 + Diesel Oil	0.4 mg/ml each	Ampoule 6	Mineral Oil CAS:8042-47-5 + Diesel Oil	1.0 mg/ml each

**Solvent:** n-Hexane      **Volume:** 6 ampoules x 5 ml      **Ref.:** F109681

### Extraction Solvent Stock Solution (ISO 9377-2-Mod) - 2 components

n-Decane (C10)	CAS:124-18-5	20 ul/l	n-Tetracontane (C40)	CAS:4181-95-7	20 mg/l
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**Solvent:** n-Hexane      **Volume:** ampoule 10 ml      **Ref.:** F109741

**Solvent:** n-Hexane/Petroleum ether (1/1)      **Volume:** ampoule 10 ml  
ampoule 5 ml      **Ref.:** F109751  
F109751.5

### Stearyl Stearate Test Solution (ISO 9377-2-Mod)

Stearyl Stearate	CAS:2778-96-3
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**Solvent:** n-Hexane      **Volume:** ampoule 1 ml      **Concentration (ug/ml):** 2000      **Ref.:** P858450

ampoule 10 ml      **Ref.:** F109761

### Florisil Cartridge QC Standard Mixture (ISO 9377-2-Mod) - 2 components

Mineral Oil	CAS:8042-47-5	Diesel Oil	CAS: N/A
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**Solvent:** n-Hexane      **Volume:** ampoule 5 ml      **Concentration (ug/ml):** 1000      **Ref.:** F109651

### Mixture of Mineral Oils (A+B) (Diesel Fuel/Lubricating Oil): 1/1 (neat) - 2 components (ISO 9377-2-Mod)

Mineral Oil 50 %	CAS:8042-47-5	Diesel Oil 50 %	CAS: N/A
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**Solvent:** n-Hexane      **Volume:** ampoule 1 ml      **Ref.:** F109631  
ampoule 5 ml      F061945

**n-Alkane Standard Solution - 16 components C10 ÷ C40 (all even) (ISO 9377-2-Mod)**

n-Decane (C10)	CAS:124-18-5	n-Docosane (C22)	CAS:629-97-0	n-Tetracontane (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		

<b>Solvent:</b> n-Hexane/Petroleum ether (1/1)	<b>Volume:</b> ampoule 5 ml	<b>Concentration (ug/ml):</b> 100	<b>Ref.:</b> F109771
<b>Solvent:</b> n-Hexane	<b>Volume:</b> ampoule 5 ml	<b>Concentration (ug/ml):</b> 50	<b>Ref.:</b> F109781
	ampoule 1 ml	50	F109781.1

**Quality Control Standard of Mineral Oils (ISO 9377-2-Mod)**

Mineral Oil	CAS:8042-47-5	Diesel Oil	CAS: N/A
<b>Solvent:</b> Acetone	<b>Volume:</b> ampoule 5 ml	<b>Concentration (ug/ml):</b> 500	<b>Ref.:</b> F109641
<b>Solvent:</b> n-Hexane	<b>Volume:</b> ampoule 5 ml	<b>Concentration (ug/ml):</b> 5000	<b>Ref.:</b> F109661
	ampoule 5 ml	10000	F109671

**VOC Standard Solution 22 components (ISO 10301:1997)**

Dichloromethane	CAS:75-09-2	cis-1,2-Dichloroethene	CAS:156-59-2	Dibromomethane	CAS:74-95-3
Chloroform	CAS:67-66-3	trans-1,2-Dichloroethene	CAS:156-60-5	Tribromomethane	CAS:75-25-2
Tetrachloromethane	CAS:56-23-5	Trichloroethene	CAS:79-01-6	1,2-Dibromoethane	CAS:106-93-4
1,1-Dichloroethane	CAS:75-34-3	Tetrachloroethene	CAS:127-18-4	Bromochloromethane	CAS:74-97-5
1,2-Dichloroethane	CAS:107-06-2	1,2-Dichloropropane	CAS:78-87-5	Bromodichloromethane	CAS:75-27-4
1,1,1-Trichloroethane	CAS:71-55-6	1,3-Dichloropropane	CAS:142-28-9	Dibromochloromethane	CAS:124-48-1
1,1,2-Trichloroethane	CAS:79-00-5	cis-1,3-Dichloropropene	CAS:10061-01-5		
1,1-Dichloroethene	CAS:75-35-4	trans-1,3-Dichloropropene	CAS:10061-02-6		

<b>Solvent:</b> Iso-octane	<b>Volume:</b> ampoule 10 ml	<b>Concentration (ug/ml):</b> 10	<b>Ref.:</b> F128961
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**NCC/OPP Standard Solution 12 components (ISO 10695:2000)**

Atrazine	CAS:1912-24-9	Parathion-methyl	CAS:298-00-0	Simazine (CAT)	CAS:122-34-9
Cyanazine	CAS:21725-46-2	Pendimethalin	CAS:40487-42-1	Terbutylazine	CAS:5915-41-3
Metazachlor	CAS:67129-08-2	Propazine	CAS:139-40-2	Trifluralin	CAS:1582-09-8
Parathion (Parathion-ethyl)	CAS:56-38-2	Sebutylazine	CAS:7286-69-3	Vinclozolin	CAS:50471-44-8

<b>Solvent:</b> Acetone	<b>Volume:</b> ampoule 10 ml	<b>Concentration (mg/l):</b> 10	<b>Ref.:</b> F128971
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**NCC Standard Solution 17 components (ISO 11369:1997)**

Atrazine	CAS:1912-24-9	Isoproturon	CAS:34123-59-6	Metoxuron	CAS:19937-59-8
Chlortoluron	CAS:15545-48-9	Linuron	CAS:330-55-2	Monolinuron	CAS:1746-81-2
Cyanazine	CAS:21725-46-2	Metazachlor	CAS:67129-08-2	Sebutylazine	CAS:7286-69-3
Atrazine-desethyl	CAS:6190-65-4	Methabenzthiazuron	CAS:18691-97-9	Simazine (CAT)	CAS:122-34-9
Diuron	CAS:330-54-1	Metobromuron	CAS:3060-89-7	Terbutylazine	CAS:5915-41-3
Hexazinone	CAS:51235-04-2	Metolachlor	CAS:51218-45-2		

<b>Solvent:</b> Acetonitrile	<b>Volume:</b> ampoule 1 ml	<b>Concentration (ug/ml):</b> 10	<b>Ref.:</b> F129021
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**ACs Standard Solution 6 components (ISO 11423-2:1997)**

Benzene	CAS:71-43-2	o-Xylene	CAS:95-47-6	p-Xylene	CAS:106-42-3
Toluene	CAS:108-88-3	m-Xylene	CAS:108-38-3	Ethylbenzene	CAS:100-41-4

<b>Solvent:</b> Acetone	<b>Volume:</b> ampoule 5 ml	<b>Concentration (ug/ml):</b> 50	<b>Ref.:</b> F129001
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## ISO 13876: Stock Standard Solution of 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:** Iso-octane      **Volume:** ampoule 1 ml      **Concentration:** 1 mg/kg      **Ref.:** F236884

## ISO 15680 Stock Calibration Standard Solution

1,1-Dichloroethene	CAS:75-35-4	Toluene	CAS:108-88-3	2-Chlorotoluene	CAS:95-49-8
Dichloromethane	CAS:75-09-2	1,1,2-Trichloroethane	CAS:79-00-5	4-Chlorotoluene	CAS:106-43-4
trans-1,2-Dichloroethene	CAS:156-60-5	Tetrachloroethene	CAS:127-18-4	1,3,5-Trimethylbenzene	CAS:108-67-8
1,1-Dichloroethane	CAS:75-34-3	1,3-Dichloropropane	CAS:142-28-9	1,2,4-Trimethylbenzene	CAS:95-63-6
2,2-Dichloropropane	CAS:594-20-7	Dibromochloromethane	CAS:124-48-1	tert-Butylbenzene	CAS:98-06-6
cis-1,2-Dichloroethene	CAS:156-59-2	1,2-Dibromoethane	CAS:106-93-4	sec-Butylbenzene	CAS:135-98-8
Bromochloromethane	CAS:74-97-5	Chlorobenzene	CAS:108-90-7	1,3-Dichlorobenzene	CAS:541-73-1
Chloroform	CAS:67-66-3	1,1,1,2-Tetrachloroethane	CAS:630-20-6	1,4-Dichlorobenzene	CAS:106-46-7
1,1,1-Trichloroethane	CAS:71-55-6	Ethylbenzene	CAS:100-41-4	4-Isopropyltoluene	CAS:99-87-6
Tetrachloromethane	CAS:56-23-5	m-Xylene	CAS:108-38-3	1,2-Dichlorobenzene	CAS:95-50-1
1,1-Dichloropropene	CAS:563-58-6	o-Xylene	CAS:95-47-6	n-Butylbenzene	CAS:104-51-8
Benzene	CAS:71-43-2	p-Xylene	CAS:106-42-3	1,2-Dibromo-3-chloropropane	CAS:96-12-8
1,2-Dichloroethane	CAS:107-06-2	Styrene	100-42-5	1,2,4-Trichlorobenzene	CAS:120-82-1
Trichloroethene	CAS:79-01-6	Tribromomethane	CAS:75-25-2	Hexachloro-1,3-butadiene	CAS:87-68-3
1,2-Dichloropropane	CAS:78-87-5	Isopropylbenzene	CAS:98-82-8	Naphthalene	CAS:91-20-3
Dibromomethane	CAS:74-95-3	Bromobenzene	CAS:108-86-1	1,2,3-Trichlorobenzene	CAS:87-61-6
Bromodichloromethane	CAS:75-27-4	1,1,2,2-Tetrachloroethane	CAS:79-34-5	1,3,5-Trichlorobenzene	CAS:108-70-3
trans-1,3-Dichloropropene	CAS:10061-02-6	1,2,3-Trichloropropane	CAS:96-18-4		
cis-1,3-Dichloropropene	CAS:10061-01-5	n-Propylbenzene	CAS:103-65-1		

**Solvent:** Methanol (purge & trap)      **Volume:** ampoule 1 ml      **Concentration (ug/ml):** 2000      **Ref.:** F235654

## Phenoxyacetic Herbicides Standard Solution 10 components (ISO 15913:2000)

2,4-D	CAS:94-75-7	MCPB	CAS:94-81-5	Bromoxynil	CAS:1689-84-5
Mecoprop (MCP)	CAS:7085-19-0	2,4,5-Trichlorophenoxy acetic acid		2,4-DB	CAS:94-82-6
Dichloroprop	CAS:120-36-5		CAS:93-76-5	Fenoprop	CAS:93-72-1
MCPA	CAS:94-74-6	Bentazone	CAS:25057-89-0		

**Solvent:** Acetone      **Volume:** ampoule 1 ml      **Concentration (ug/ml):** 500      **Ref.:** F129031

## ISO 17943:2016 - Multi-component stock solutions: 63 components

Methyl-tert-amylether	CAS:994-05-8	cis-1,2-Dichloroethene	CAS:156-59-2	Styrene	CAS:100-42-5
Benzene	CAS:71-43-2	trans-1,2-Dichloroethene	CAS:156-60-5	1,1,1,2-Tetrachloroethane	CAS:630-20-6
Bromobenzene	CAS:108-86-1	Dichloromethane	CAS:75-09-2	1,1,2,2-Tetrachloroethane	CAS:79-34-5
Bromochloromethane	CAS:74-97-5	1,2-Dichloropropane	CAS:78-87-5	Tetrachloroethene	CAS:127-18-4
Bromodichloromethane	CAS:75-27-4	1,3-Dichloropropane	CAS:142-28-9	Tetrachloromethane	CAS:56-23-5
n-Butylbenzene	CAS:104-51-8	2,2-Dichloropropane	CAS:594-20-7	Toluene	CAS:108-88-3
sec-Butylbenzene	CAS:135-98-8	1,1-Dichloropropene	CAS:563-58-6	Tribromomethane	CAS:75-25-2
tert-Butylbenzene	CAS:98-06-6	cis-1,3-Dichloropropene	CAS:10061-01-5	1,2,3-Trichlorobenzene	CAS:87-61-6
Chlorobenzene	CAS:108-90-7	trans-1,3-Dichloropropene	CAS:10061-02-6	1,2,4-Trichlorobenzene	CAS:120-82-1
2-Chlorotoluene	CAS:95-49-8	Ethylbenzene	CAS:100-41-4	1,3,5-Trichlorobenzene	CAS:108-70-3
4-Chlorotoluene	CAS:106-43-4	Ethyl-tert-butylether (ETBE)	CAS:637-92-3	1,1,1-Trichloroethane	CAS:71-55-6
Dibromochloromethane	CAS:124-48-1	2-Ethyl-4-methyl-1,3-dioxolane	CAS:4359-46-0	1,1,2-Trichloroethane	CAS:79-00-5
1,2-Dibromo-3-chloropropane	CAS:96-12-8	2-Ethyl-5,5-dimethyl-1,3-dioxane	CAS:768-58-1	Trichloroethene	CAS:79-01-6
1,2-Dibromoethane	CAS:106-93-4	(±)-Geosmin	CAS:16423-19-1	Chloroform (Trichloromethane)	CAS:67-66-3
Dibromomethane	CAS:74-95-3	Hexachloro-1,3-butadiene	CAS:98-82-8	1,2,3-Trichloropropane	CAS:96-18-4
1,2-Dichlorobenzene	CAS:95-50-1	Isopropylbenzene	CAS:98-82-8	1,2,4-Trimethylbenzene	CAS:95-63-6
1,3-Dichlorobenzene	CAS:541-73-1	4-Isopropyltoluene	CAS:99-87-6	1,3,5-Trimethylbenzene	CAS:108-67-8
1,4-Dichlorobenzene	CAS:106-46-7	2-Methylisoborneol	CAS:2371-42-8	Vinylchloride	CAS:75-01-4
1,1-Dichloroethane	CAS:75-34-3	Methyl-tert-butylether	CAS:1634-04-4	m-Xylene	CAS:108-38-3
1,2-Dichloroethane	CAS:107-06-2	Naphthalene	CAS:91-20-3	o-Xylene	CAS:95-47-6
1,1-Dichloroethene	CAS:75-35-4	n-Propylbenzene	CAS:103-65-1	p-Xylene	CAS:106-42-3

**Solvent:** Methanol (purge & trap)      **Volume:** ampoule 1 ml      **Concentration (ug/ml):** 10      **Ref.:** F236254



**Phenols Standard Solution 14 components (ISO 17495:2001)**

2-Nitrophenol	CAS:88-75-5	5-Methyl-2-nitrophenol	CAS:700-38-9	2,4-Dinitro-6-methylphenol	CAS:534-52-1
3-Nitrophenol	CAS:554-84-7	3-Methyl-2-nitrophenol	CAS:4920-77-8	2,6-Dimethyl-4-nitrophenol	CAS:2423-71-4
4-Nitrophenol	CAS:100-02-7	2,4-Dinitrophenol	CAS:51-28-5	2,4-Dichloro-6-nitrophenol	CAS:609-89-2
4-Methyl-2-nitrophenol	CAS:119-33-5	2,5-Dinitrophenol	CAS:329-71-5	2,6-Dichloro-4-nitrophenol	CAS:618-80-4
3-Methyl-4-nitrophenol	CAS:2581-34-2	2,6-Dinitrophenol	CAS:573-56-8		

**Solvent:** Ethyl Acetate      **Volume:** ampoule 1 ml      **Concentration (ug/ml):** 500      **Ref.:** F129051

**Multiple compound stock solution (ISO 17993)**

Naphthalene	CAS:91-20-3	Benzo(b)fluoranthene	CAS:205-99-2	Pyrene	CAS:129-00-0
Acenaphthene	CAS:83-32-9	Benzo(a)pyrene	CAS:50-32-8	Chrysene	CAS:218-01-9
Phenanthrene	CAS:85-01-8	Dibenzo(a,h)anthracene	CAS:53-70-3	Benzo(k)fluoranthene	CAS:207-08-9
Fluoranthene	CAS:206-44-0	Fluorene	CAS:86-73-7	Indeno(1,2,3-c,d)pyrene	CAS:193-39-5
Benzo(a)anthracene	CAS:56-55-3	Anthracene	CAS:120-12-7	Benzo(g,h,i)perylene	CAS:191-24-2

**Solvent:** Acetonitrile      **Volume:** ampoule 1 ml  
ampoule 5 ml      **Concentration (ug/ml):** 10  
10      **Ref.:** F110041.1  
F110041

**Phthalates Standard Solution 11 components (ISO 18856:2004)**

Dimethyl phthalate	CAS:131-11-3	Dibutylphthalate	CAS:84-74-2	Di-n-octylphthalate	CAS:117-84-0
Diethyl phthalate	CAS:84-66-2	Butyl benzyl phthalate	CAS:85-68-7	Didecyl phthalate	CAS:84-77-5
Phthalic acid, bis-propyl ester	CAS:131-16-8	Dicyclohexyl phthalate	CAS:84-61-7	Diundecyl phthalate	CAS:3648-20-2
Di-iso-butylphthalate	CAS:84-69-5	Di-2-ethylhexylphthalate	CAS:117-81-7		

**Solvent:** Ethyl Acetate      **Volume:** ampoule 1 ml      **Concentration: (ug/ml):** 1000      **Ref.:** F129191

**ISO 22032 - Internal Standard Stock Solution 2 components**

BDE 77	CAS:93703-48-1	BDE 181	CAS:189084-67-1
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**Solvent:** Iso-octane      **Volume:** ampoule 1 ml      **Concentration (ug/ml):** 100      **Ref.:** F235894

**Standard Solution 7 components (ISO 23631:2006)**

Bromochloroacetic Acid	CAS:5589-96-8	Dichloroacetic Acid	CAS:79-43-6	Trichloroacetic acid	CAS:76-03-9
Dalapon	CAS:75-99-0	Monobromoacetic Acid	CAS:79-08-3		
Dibromoacetic acid	CAS:631-64-1	Monochloroacetic Acid	CAS:79-11-8		

**Solvent:** Methyl-tert.butylether      **Volume:** ampoule 10 ml      **Concentration (ug/ml):** 10      **Ref.:** F129500





# European and US Pharmacopoeia methods



# Ph Eur

## Fatty Acids - Method A Reference Solution (a) according to Ph Eur 2.4.22-1 - 6 components

Methyl laurate	CAS:111-82-0	0.0005% (m/m)	Methyl stearate	CAS:112-61-8	0.002% (m/m)
Methyl myristoleate	CAS:56219-06-8	0.0005% (m/m)	Methyl arachidate	CAS:1120-28-1	0.004% (m/m)
Methyl palmitate	CAS:112-39-0	0.001% (m/m)	Methyl Oleate	CAS:112-62-9	0.002% (m/m)

**Solvent:** n-Heptane

**Volume:** ampoule 1 ml

**Ref.:** 2.4.22-1-RSA

## Fatty Acids - Method A Reference Solution (b) - 6 components diluted 1:10 in heptane R

Dodecanoic acid-methyl ester (Methyl laurate)	CAS:111-82-0	Hexadecanoic acid-methyl ester (Methyl palmitate)	CAS:112-39-0	Eicosanoic acid-methyl ester (Methyl arachidate)	CAS:1120-28-1
Methyl myristoleate	CAS:56219-06-8	Octadecanoic acid-methyl ester (Methyl stearate)	CAS:112-61-8	Methyl Oleate	CAS:112-62-9

**Volume:** ampoule 10 ml

**Ref.:** 2.4.22-1-RSB

## Fatty Acids – Mixture of calibrating substances according to Ph Eur 2.4.22-1 - 6 components

Methyl laurate R	CAS:111-82-0	5% (m/m)	Methyl stearate R	CAS:112-61-8	20% (m/m)
Methyl myristate R	CAS:124-10-7	5% (m/m)	Methyl arachidate R	CAS:1120-28-1	40% (m/m)
Methyl palmitate R	CAS:112-39-0	10% (m/m)	Methyl Oleate R	CAS:112-62-9	20% (m/m)

**Volume:** ampoule 100 mg

**Ref.:** 2.4.22-1

## Fatty Acids - Mixture of calibrating substances according to Ph Eur 2.4.22-2 - 5 components

Methyl caproate R	CAS:106-70-7	10% (m/m)	Methyl laurate R	CAS:111-82-0	20% (m/m)
Methyl caprylate R	CAS:111-11-5	10% (m/m)	Tetradecanoic acid-methyl ester (Methyl myristate)	CAS:124-10-7	40% (m/m)
Methyl decanoate R	CAS:110-42-9	20% (m/m)			

**Volume:** ampoule 100 mg

**Ref.:** 2.4.22-2

## Fatty Acids - Mixture of calibrating substances according to Ph Eur 2.4.22-3 - 8 components

Methyl myristate R	CAS:124-10-7	5% (m/m)	Methyl Oleate	CAS:112-62-9	20% (m/m)
Methyl palmitate R	CAS:112-39-0	10% (m/m)	Methyl Eicosenoate R	CAS:2390-09-2	10% (m/m)
Methyl stearate R	CAS:112-61-8	15% (m/m)	Methyl behenate R	CAS:929-77-1	10% (m/m)
Methyl arachidate R	CAS:1120-28-1	20% (m/m)	Methyl Linocerate R	CAS:2442-49-1	10% (m/m)

**Volume:** ampoule 100 mg

**Ref.:** 2.4.22-3

## Ph Eur 2.4.24. Residual Solvents Class 1 - 5 components

Benzene	CAS:71-43-2	10 mg/ml	1,2-Dichloroethane	CAS:107-06-2	25 mg/ml
Tetrachloromethane (Carbon tetrachloride)	CAS:56-23-5	20 mg/ml	1,1-Dichloroethene	CAS:75-35-4	40 mg/ml
			1,1,1-Trichloroethane	CAS:71-55-6	50 mg/ml

**Solvent:** Dimethylsulphoxide

**Volume:** ampoule 1 ml

**Ref.:** F078950



### Ph Eur 2.4.24. Residual Solvents Class 2 Mix A - 5 components

Benzene	CAS:71-43-2	2 ug/ml	Tetrachloromethane	CAS:56-23-5	4 ug/ml
1,2-Dichloroethane	CAS:107-06-2	5 ug/ml	1,1,1-Trichloroethane	CAS:71-55-6	10 ug/ml
1,1-Dichloroethene	CAS:75-35-4	8 ug/ml			

**Solvent:** Dimethylsulphoxide/Water (9/1)

**Volume:** ampoule 1 ml

**Ref.:** F131530

### Ph Eur 2.4.24. Residual Solvents Class 2 Mix A - 14 components

Chlorobenzene	CAS:108-90-7	360 ug/ml	Dimethylformamide (N,N - Dimethylformamide)	CAS:68-12-2	880 ug/ml
Cyclohexane	CAS:110-82-7	3880 ug/ml	Toluene	CAS:108-88-3	890 ug/ml
cis-1,2-Dichloroethene	CAS:156-59-2	1870 ug/ml	Trichloroethene (1,1,2-Trichloroethene)	CAS:79-01-6	80 ug/ml
Dichloromethane	CAS:75-09-2	600 ug/ml	m-Xylene	CAS:108-38-3	1302 ug/ml
Ethylbenzene	CAS:100-41-4	369 ug/ml	o-Xylene	CAS:95-47-6	195 ug/ml
n-Hexane	CAS:110-54-3	290 ug/ml	p-Xylene	CAS:106-42-3	304 ug/ml
Methylcyclohexane	CAS:108-87-2	1180 ug/ml	Tetrahydrofuran	CAS:109-99-9	720 ug/ml

**Solvent:** Dimethylsulphoxide

**Volume:** ampoule 1 ml

**Ref.:** F241674

### Ph Eur 2.4.24. Residual Solvents Class 2 Mix B - 10 components

Acetonitrile	CAS:75-05-8	410 ug/ml	2-Hexanone	CAS:591-78-6	50 ug/ml
Chloroform	CAS:67-66-3	60 ug/ml	Methanol	CAS:67-56-1	3000 ug/ml
1,2-Dimethoxyethane	CAS:110-71-4	100 ug/ml	Nitromethane	CAS:75-52-5	50 ug/ml
N,N-Dimethylacetamide	CAS:127-19-5	1090 ug/ml	Pyridine	CAS:108-99-6	200 ug/ml
Dioxan	CAS:123-91-1	380 ug/ml	1,2,3,4-Tetrahydronaphthalene	CAS:119-64-2	100 ug/ml

**Solvent:** Dimethylsulphoxide/Water (9/1)

**Volume:** ampoule 1 ml

**Ref.:** F131670

### Ph Eur 2.4.24. Residual Solvents Class 2 Mix C - 6 components

Ethyleneglycol-monoethyl ether (2-Ethoxyethanol)	CAS:110-80-5	160 ug/ml	Ethyleneglycol-monomethyl ether (2-Methoxyethanol)	CAS:109-86-4	50 ug/ml
Ethyleneglycol	CAS:107-21-1	620 ug/ml	1-Methyl-2-pyrrolidone (N-Methyl Pyrrolidone)	CAS:872-50-4	4840 ug/ml
Formamide	CAS:75-12-7	220 ug/ml	Sulfolan	CAS:126-33-0	160 ug/ml

**Solvent:** Water

**Volume:** ampoule 1 ml

**Ref.:** F131540

## USP 467 Residual Solvents Mixture Class 1 - 5 components

Benzene	CAS:71-43-2	10 mg/ml	1,2-Dichloroethane	CAS:107-06-2	25 mg/ml
Tetrachloromethane (Carbon tetrachloride)	CAS:56-23-5	20 mg/ml	1,1-Dichloroethene	CAS:75-35-4	40 mg/ml
			1,1,1-Trichloroethane	CAS:71-55-6	50 mg/ml

**Solvent:** Dimethylsulphoxide      **Volume:** ampoule 1 ml

**Ref.:** F078950

## USP 467 Residual Solvents Class 2 – Mixture A - 16 components

Acetonitrile	CAS:75-05-8	2.05 mg/ml	Methylcyclohexane	CAS:108-87-2	5.9 mg/ml
Chlorobenzene	CAS:108-90-7	1.8 mg/ml	Dichloromethane (Methylene chloride)	CAS:75-09-2	3 mg/ml
Cyclohexane	CAS:98-82-8	19.4 mg/ml	Tetrahydrofuran	CAS:109-99-9	3.6 mg/ml
cis-1,2-Dichloroethene	CAS:156-59-2	4.7 mg/ml	Toluene	CAS:108-88-3	4.45 mg/ml
trans-1,2-Dichloroethene	CAS:156-60-5	4.7 mg/ml	m-Xylene	CAS:108-38-3	6.51 mg/ml
Dioxan (1,4-Dioxane)	CAS:123-91-1	1.9 mg/ml	o-Xylene	CAS:95-47-6	0.98 mg/ml
Ethylbenzene	CAS:100-41-4	1.84 mg/ml	p-Xylene	CAS:106-42-3	1.52 mg/ml
Methanol	CAS:67-56-1	15 mg/ml	Isopropylbenzene (Cumene)	CAS:98-82-8	0.34 mg/ml

**Solvent:** Dimethylsulphoxide      **Volume:** ampoule 1 ml

**Ref.:** F241704

## USP 467 Residual Solvents Class 2 - Mixture B - 8 components

Chloroform	CAS:67-66-3	60 ug/ml	Nitromethane	CAS:75-52-5	50 ug/ml
1,2-Dimethoxyethane	CAS:110-71-4	100 ug/ml	Pyridine	CAS:110-86-1	200 ug/ml
n-Hexane	CAS:110-54-3	290 ug/ml	1,2,3,4-Tetrahydronaphthalene (Tetralin)	CAS:119-64-2	100 ug/ml
2-Hexanone	CAS:591-78-6	50 ug/ml	Trichloroethene	CAS:79-01-6	80 ug/ml

**Solvent:** Dimethylsulphoxide      **Volume:** ampoule 100 mg

**Ref.:** F241724

## USP 467 Calibration Mixture - 5 components

Benzene	CAS:71-43-2	2 ug/ml	Dichloromethane (Methylene chloride)	CAS:75-09-2	600 ug/ml
Chloroform	CAS:67-66-3	60 ug/ml	Trichloroethene	CAS:79-01-6	80 ug/ml
Dioxan (1,4-Dioxane)	CAS:123-91-1	380 ug/ml			

**Solvent:** Dimethylsulphoxide      **Volume:** ampoule 1 ml

**Ref.:** F128901

## USP 467 Calibration Mixture - 5 components

Benzene	CAS:71-43-2	2 ug/ml	Dichloromethane (Methylene chloride)	CAS:75-09-2	600 ug/ml
Chloroform	CAS:67-66-3	60 ug/ml	Trichloroethene	CAS:79-01-6	80 ug/ml
Dioxan (1,4-Dioxane)	CAS:123-91-1	380 ug/ml			

**Solvent:** Methanol      **Volume:** ampoule 1 ml

**Ref.:** F128911

## USP 467 Calibration Mixture - 5 components

Benzene	CAS:71-43-2	100 ug/ml	Dichloromethane (Methylene chloride)	CAS:75-09-2	500 ug/ml
Chloroform	CAS:67-66-3	50 ug/ml	Trichloroethene	CAS:79-01-6	100 ug/ml
Dioxan (1,4-Dioxane)	CAS:123-91-1	100 ug/ml			

**Solvent:** Dimethylsulphoxide      **Volume:** ampoule 1 ml

**Ref.:** F241744







# EN methods



# Characterization of waste

## EN 14039 - Retention time window Standard Solution 2 components

n-Decane n-Heptane CAS:124-18-5 | n-Tetracontane CAS:4181-95-7

**Solvent:** n-Heptane **Volume:** ampoule 10 ml **Concentration (ug/ml):** 30 **Ref.:** F235764

## EN 14039 - System Performance Standard Solution 16 components

n-Decane (C10)	CAS:124-18-5	n-Docosane (C22)	CAS:629-97-0	n-Tetracontane (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-Heptane **Volume:** ampoule 5 ml **Concentration (ug/ml):** 50 **Ref.:** F235784

## EN 14039 - System Performance Standard Solution 16 components

n-Decane (C10)	CAS:124-18-5	n-Docosane (C22)	CAS:629-97-0	n-Tetracontane (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-Heptane **Volume:** ampoule 5 ml **Concentration (ug/ml):** 50 **Ref.:** F235784

## EN 15308: PCBs Standard Solution 7 components

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

**Solvent:** Iso-octane **Volume:** ampoule 1 ml **Concentration (ug/ml):** 100 **Ref.:** F131391

## EN 15527: 16 components

Acenaphthene	CAS:83-32-9	Benzo(g,h,i)perylene	CAS:191-24-2	Indeno(1,2,3-c,d)pyrene	CAS:193-39-5
Acenaphthylene	CAS:208-96-8	Benzo(k)fluoranthene	CAS:207-08-9	Naphthalene	CAS:91-20-3
Anthracene	CAS:120-12-7	Chrysene	CAS:218-01-9	Phenanthrene	CAS:85-01-8
Benzo(a)anthracene	CAS:56-55-3	Dibenzo(a,h)anthracene	CAS:53-70-3	Pyrene	CAS:129-00-0
Benzo(a)pyrene	CAS:50-32-8	Fluoranthene	CAS:206-44-0		
Benzo(b)fluoranthene	CAS:205-99-2	Fluorene	CAS:86-73-7		

**Solvent:** n-Hexane **Volume:** ampoule 5 ml **Concentration (ug/ml):** 10 **Ref.:** F109871



# Food analysis

## CEN/TS 16621: PAH 4 standard solution of 4 components

Benzo(a)pyrene	CAS:50-32-8	Benzo(b)fluoranthene	CAS:205-99-2
Benzo(a)anthracene	CAS:56-55-3	Chrysene	CAS:218-01-9

**Solvent:** Acetonitrile      **Volume:** ampoule 10 ml      **Concentration (ug/ml):** 10      **Ref.:** F236784

## CEN/TS 16621 15+1 EU Priority PAHs Standard Solution

Benzo(a)pyrene	CAS:50-32-8	Benzo(g,h,i)perylene	CAS:191-24-2	Dibenzo(a,l)pyrene	CAS:191-30-0]
Chrysene	CAS:218-01-9	Indeno(1,2,3-c,d)pyrene	CAS:193-39-5	Dibenzo(a,e)pyrene	CAS:192-65-4
Benzo(b)fluoranthene	CAS:205-99-2	7H-Benzo(c)fluorene	CAS:205-12-9	Dibenzo(a,i)pyrene	CAS:189-55-9
Benzo(a)anthracene	CAS:56-55-3	Cyclopenta(c,d)pyrene	CAS:27208-37-3	Dibenzo(a,h)pyrene	CAS:189-64-0
Benzo(k)fluoranthene	CAS:207-08-9	5-Methylchrysene	CAS:3697-24-3		
Dibenzo(a,h)anthracene	CAS:53-70-3	Benzo(j)fluoranthene	CAS:205-82-3		

**Solvent:** Acetonitrile      **Volume:** ampoule 1 ml      **Concentration (ug/ml):** 10      **Ref.:** F236794

# Foods of plant origin

## EN 15662: Pesticide working solution for GC 16 components

Chlorpyrifos	CAS:2921-88-2	Metalaxyl	CAS:57837-19-1	Pyridaben	CAS:96489-71-3
lambda-Cyhalothrin	CAS:91465-08-6	Myclobutanil	CAS:88671-89-0	Pyrimethanil	CAS:53112-28-0
Cyprodinil	CAS:121552-61-2	Penconazole	CAS:66246-88-6	Quinoxifen	CAS:124495-18-7
Fenhexamid	CAS:126833-17-8	Pirimicarb	CAS:23103-98-2	Tetradifon	CAS:116-29-0
Imazalil	CAS:35554-44-0	Procymidone	CAS:32809-16-8		
Kresoxim-methyl	CAS:143390-89-0	Propyzamide	CAS:23950-58-5		

**Solvent:** Acetone      **Volume:** ampoule 1 ml      **Concentration (mg/kg):** 10      **Ref.:** F236634

## EN 15662: Pesticide working solution for LC 16 components

Acephate	CAS:30560-19-1	Fenthion	CAS:55-38-9	Pirimiphos-ethyl	CAS:23505-41-1
Cinosulfuron	CAS:94593-91-6	Imazosulfuron	CAS:122548-33-8	Profenofos	CAS:41198-08-7
Demeton-S-methyl-sulfone	CAS:17040-19-6	Methamidophos	CAS:10265-92-6	Thifensulfuron-methyl	CAS:79277-27-3
Demeton-S-methyl-sulfoxide	CAS:301-12-2	Metsulfuron-methyl	CAS:74223-64-6	Vamidothion	CAS:2275-23-2
Dimethoate	CAS:60-51-5	Monocrotophos	CAS:6923-22-4		
Ethoprophos	CAS:13194-48-4	Omethoate	CAS:1113-02-6		

**Solvent:** Acetonitrile      **Volume:** ampoule 1 ml      **Concentration (mg/kg):** 10      **Ref.:** F237564

## EN 15662: Pesticide working solution for LC 20 components

4-Chlorophenoxyacetic acid	CAS:122-88-3	Fluazifop	CAS:69335-91-7	MCPB	CAS:94-81-5
2,4-D	CAS:94-75-7	Fluroxypyr	CAS:69377-81-7	Mecoprop (MCP)	CAS:7085-19-0
2,4-DB	CAS:94-82-6	Haloxypol	CAS:69806-34-4	2-Naphthoxy acetic acid	CAS:120-23-0
Dicamba	CAS:1918-00-9	Imazapyr	CAS:81334-34-1	Quinmerac	CAS:90717-03-6
Dichlorprop	CAS:120-36-5	Imazaquin	CAS:81335-37-7	2,4,5-T	CAS:93-76-5
Fenoprop (2,4,5-TP)	CAS:93-72-1	Imazethapyr	CAS:81335-77-5	Triclopyr	CAS:55335-06-3
Fenoxaprop-P	CAS:113158-40-0	MCPA	CAS:94-74-6		

**Solvent:** Acetonitrile      **Volume:** ampoule 1 ml      **Concentration (mg/kg):** 10      **Ref.:** F237584

## EN 15662: Pesticide working solution for LC 31 components

Acetamiprid	CAS:135410-20-7	Fenpyroximate	CAS:111812-58-9	Pyraclostrobin	CAS:175013-18-0
Azoxystrobin	CAS:131860-33-8	Flufenacet	CAS:142459-58-3	Tebuconazole	CAS:107534-96-3
Chloridazon	CAS:1698-60-8	Flusilazole	CAS:85509-19-9	Tebufenpyrad	CAS:119168-77-3
Clofentezine	CAS:74115-24-5	Hexaconazole	CAS:79983-71-4	Tetraconazole	CAS:112281-77-3
Cyproconazole	CAS:94361-06-5	Imidacloprid	CAS:138261-41-3	Thiabendazole	CAS:148-79-8
Cyromazine	CAS:66215-27-8	Mepanipyrim	CAS:110235-47-7	Thiacloprid	CAS:111988-49-9
Difenoconazole	CAS:119446-68-3	Metosulam	CAS:139528-85-1	Thiamethoxam	CAS:153719-23-4
Diniconazole	CAS:83657-24-3	Picoxystrobin	CAS:117428-22-5	Triadimefon	CAS:43121-43-3
Epoxiconazole	CAS:135319-73-2	Prometryn	CAS:7287-19-6	Trifloxystrobin	CAS:141517-21-7
Fenarimol	CAS:60168-88-9	Propiconazole	CAS:60207-90-1		
Fenazaquin	CAS:120928-09-8	Pymetrozine	CAS:123312-89-0		

Solvent: Acetonitrile

Volume: ampoule 1 ml

Concentration (mg/kg): 10

Ref.: F237574

## EN 15662: Pesticide working solution for LC 49 components

Acetamiprid	CAS:135410-20-7	Fenpyroximate	CAS:111812-58-9	Pyraclostrobin	CAS:175013-18-0
Azoxystrobin	CAS:131860-33-8	Flufenacet	CAS:142459-58-3	Tebuconazole	CAS:107534-96-3
Chloridazon	CAS:1698-60-8	Flusilazole	CAS:85509-19-9	Tebufenpyrad	CAS:119168-77-3
Clofentezine	CAS:74115-24-5	Hexaconazole	CAS:79983-71-4	Tetraconazole	CAS:112281-77-3
Cyproconazole	CAS:94361-06-5	Imidacloprid	CAS:138261-41-3	Thiabendazole	CAS:148-79-8
Cyromazine	CAS:66215-27-8	Mepanipyrim	CAS:110235-47-7	Thiacloprid	CAS:111988-49-9
Difenoconazole	CAS:119446-68-3	Metosulam	CAS:139528-85-1	Thiamethoxam	CAS:153719-23-4
Diniconazole	CAS:83657-24-3	Picoxystrobin	CAS:117428-22-5	Triadimefon	CAS:43121-43-3
Epoxiconazole	CAS:135319-73-2	Prometryn	CAS:7287-19-6	Trifloxystrobin	CAS:141517-21-7
Fenarimol	CAS:60168-88-9	Propiconazole	CAS:60207-90-1		
Fenazaquin	CAS:120928-09-8	Pymetrozine	CAS:123312-89-0		

Solvent: Acetonitrile

Volume: ampoule 1 ml

Concentration (mg/kg): 10

Ref.: F237554

## EN 15662: Pesticide working solution for LC 31 components

Aldicarb	CAS:116-06-3	Fenoxycarb	CAS:72490-01-8	Metobromuron	CAS:3060-89-7
Bendiocarb	CAS:22781-23-3	Fenpropidin	CAS:67306-00-7	Metolachlor	CAS:51218-45-2
Bentazone	CAS:25057-89-0	Fenpropimorph	67564-91-4	Oxamyl	CAS:23135-22-0
Boscalid	CAS:188425-85-6	Fludioxonil	CAS:131341-86-1	Promecarb	CAS:2631-37-0
Bromoxynil	CAS:1689-84-5	Flufenoxuron	CAS:101463-69-8	Propamocarb free base (Propamocarb)	CAS:24579-73-5
Buprofezin	CAS:69327-76-0	Flurtamone	CAS:96525-23-4	Propargite	CAS:2312-35-8
Butocarboxim	CAS:34681-10-2	Fomesafen	CAS:72178-02-0	Propoxur	CAS:114-26-1
Carbaryl	CAS:63-25-2	Hexythiazox	CAS:78587-05-0	Prosulfuron	CAS:94125-34-5
Carbendazim	CAS:10605-21-7	Indoxacarb	CAS:144171-61-9	Pyrifenox	CAS:88283-41-4
Carbofuran	CAS:1563-66-2	loxynil	CAS:1689-83-4	Pyriproxyfen	CAS:95737-68-1
Carboxin	CAS:5234-68-4	Iprovalicarb	CAS:140923-17-7	Spiroxamine	CAS:118134-30-8
Cycloxydim	CAS:101205-02-1	Isoproturon	CAS:34123-59-6	Tebufenozide	CAS:112410-23-8
Cymoxanil	CAS:57966-95-7	Linuron	CAS:330-55-2	Thiofanox	CAS:39196-18-4
Dimethachlor	CAS:50563-36-5	Lufenuron	CAS:103055-07-8	Thiophanate-methyl 3,4,5-Trimethacarb	CAS:23564-05-8 CAS:2686-99-9
Dimethomorph	CAS:110488-70-5	Methiocarb	CAS:2032-65-7		
Ethiofencarb	CAS:29973-13-5	Methomyl	CAS:16752-77-5		
Famoxadone	CAS:131807-57-3	Methoxyfenozide	CAS:161050-58-4		

Solvent: Acetonitrile 2%

Volume: ampoule 1 ml

Concentration (mg/kg): 10

Ref.: F237574



## Metallic coatings

### EN 15721: Calibration stock solution for Procedure A - 7 components

Isoamyl alcohol (3-Methyl-1-butanol) CAS:123-51-3	1-Butanol CAS:71-36-3	2-Butanol CAS:78-92-2
2-Methyl-1-butanol CAS:137-32-6	2-Methyl-1-propanol CAS:78-83-1	Methanol CAS:67-56-1
	1-Propanol CAS:71-23-8	

**Solvent:** Ethanol      **Volume:** ampoule 100 ml      **Concentration (ml/l):** 10      **Ref.:** F236754

### EN 15721: Calibration stock solution for Procedure B - 7 components

Isoamyl alcohol (3-Methyl-1-butanol) CAS:123-51-3	5 ml/l	1-Propanol CAS:71-23-8	2.5 ml/l
2-Methyl-1-butanol CAS:137-32-6	2 ml/l	2-Butanol CAS:78-92-2	1 ml/l
1-Butanol CAS:71-36-3	1 ml/l	Methanol CAS:67-56-1	5 ml/l
2-Methyl-1-propanol CAS:78-83-1	4 ml/l		

**Solvent:** Ethanol/Water (1/1)      **Volume:** ampoule 100 ml      **Ref.:** F236764

## Packaging - Flexible packaging material

### CEN/TS 16621 15+1 EU Priority PAHs Standard Solution

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

**Solvent:** Iso-octane      **Volume:** ampoule 1ml      **Concentration (ug/ml):** 200      **Ref.:** F129221

### Quality Control Standard of Mineral Oils - 2 components

Ethyl Acetate CAS:141-78-6	7.5 g/l	Ethanol CAS:64-17-5	30 g/l
2-Butanone (MEK) CAS:78-93-3	15 g/l		

**Solvent:** Methanol      **Volume:** ampoule 5 ml      **Ref.:** F237614

## Petroleum products

### EN 12916: System calibration standard 7 components

Cyclohexane CAS:110-82-7	1 % (w/v)	Naphthalene CAS:91-20-3	0.1 % (w/v)
1-Phenylidodecane CAS:123-01-3	0.1 % (w/v)	Dibenzothiophene CAS:132-65-0	0.05 % (w/v)
o-Xylene (1,2-Dimethylbenzene) CAS:95-47-6	0.5 % (w/v)	9-Methylanthracene CAS:779-02-2	0.05 % (w/v)
Hexamethylbenzene CAS:87-85-4	0.1 % (w/v)		

**Solvent:** n-Heptane      **Volume:** ampoule 5 ml      **Ref.:** F237594

### EN 16143: Stock solution 8 components

Benzo(a)pyrene CAS:50-32-8	Chrysene CAS:218-01-9	Benzo(k)fluoranthene CAS:207-08-9
Benzo(e)pyrene CAS:192-97-2	Benzo(b)fluoranthene CAS:205-99-2	Dibenzo(a,h)anthracene CAS:53-70-3
Benzo(a)anthracene CAS:56-55-3	Benzo(j)fluoranthene CAS:205-82-3	

**Solvent:** Toluene      **Volume:** ampoule 100 ml      **Concentration (mg/kg):** 100      **Ref.:** F236684

# Petroleum products and used oils

## PCBs Calibration Mixture 14 components (EN 12766)

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      **Volume:** ampoule 1ml      **Concentration (ug/ml):** 10      **Ref.:** F129161

## EN 12766-1: Calibration 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:** n-Heptane      **Volume:** ampoule 1ml      **Concentration (ug/ml):** 10      **Ref.:** F236584

## EN 12766-1: Testing mixture 5 components

Arochlor 1242	CAS: 53469-21-9	0.5 ug/ml	PCB 30	CAS : 35693-92-6	0.02 ug/ml
Arochlor 1254	CAS : 11097-69-1	0.25 ug/ml	PCB 209	CAS : 2051-24-3	0.02 ug/ml
Arochlor 1260	CAS : 11096-82-5	0.25 ug/ml			

**Solvent:** n-Heptane      **Volume:** ampoule 1ml      **Ref.:** F236594

# Pulp, paper and paperboard

## EN 16453: Intermediate solution of phthalates - 3 components

Phthalic acid, bis-iso-butyl ester (Diisobutylphthalate)	CAS:84-69-5	Phthalic acid, bis-butyl ester (Dibutylphthalate)	CAS:84-74-2	Phthalic acid,bis-2-ethylhexylester (Di-2-ethylhexylphthalate)	CAS:117-81-7
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**Solvent:** Ethyl Acetate      **Volume:** ampoule 1 ml      **Concentration (ug/ml):** 50      **Ref.:** F236774

# Sludge, treated biowaste and soil

## CEN/TS 16181: Multiple substance stock solution for GC 16 components

Naphthalene	CAS:91-20-3	Fluoranthene	CAS:206-44-0	Benzo(a)pyrene	CAS:50-32-8
Acenaphthylene	CAS:208-96-8	Pyrene	CAS:129-00-0	Dibenzo(a,h)anthracene	CAS:53-70-3
Acenaphthene	CAS:83-32-9	Benzo(a)anthracene	CAS:56-55-3	Benzo(g,h,i)perylene	CAS:191-24-2
Fluorene	CAS:86-73-7	Chrysene	CAS:218-01-9	Indeno(1,2,3-c,d)pyrene	CAS:193-39-5
Phenanthrene	CAS:85-01-8	Benzo(b)fluoranthene	CAS:205-99-2		
Anthracene	CAS:120-12-7	Benzo(k)fluoranthene	CAS:207-08-9		

**Solvent:** Toluene      **Volume:** ampoule 1 ml      **Concentration (ug/ml):** 10      **Ref.:** F236694



### CEN/TS 16181: Multiple substance stock solution for HPLC 16 components

Naphthalene	CAS:91-20-3	Fluoranthene	CAS:206-44-0	Benzo(a)pyrene	CAS:50-32-8
Acenaphthylene	CAS:208-96-8	Pyrene	CAS:129-00-0	Dibenzo(a,h)anthracene	CAS:53-70-3
Acenaphthene	CAS:83-32-9	Benzo(a)anthracene	CAS:56-55-3	Benzo(g,h,i)perylene	CAS:191-24-2
Fluorene	CAS:86-73-7	Chrysene	CAS:218-01-9	Indeno(1,2,3-c,d)pyrene	CAS:193-39-5
Phenanthrene	CAS:85-01-8	Benzo(b)fluoranthene	CAS:205-99-2		
Anthracene	CAS:120-12-7	Benzo(k)fluoranthene	CAS:207-08-9		

**Solvent:** Acetonitrile      **Volume:** ampoule 1 ml      **Concentration (ug/ml):** 10      **Ref.:** F236714

### CEN/TS 16183: Stock Solution 11 components

Phthalic acid, bis-methyl ester (Dimethyl phthalate)	CAS:131-11-3	Phthalic acid, bis-butyl ester (Dibutyl phthalate)	CAS:84-74-2	Phthalic acid, bis-1-octyl ester (di-n-octyl phthalate)	CAS:117-84-0
Phthalic acid, bis-ethyl ester (Diethyl phthalate)	CAS:84-66-2	Phthalic acid, benzylbutyl ester (Benzyl butyl phthalate)	CAS:85-68-7	Phthalic acid, bis-decyl ester (Didecyl phthalate)	CAS:84-77-5
Phthalic acid, bis-propyl ester (Dipropyl phthalate)	CAS:131-16-8	Dicyclohexyl phthalate	CAS:84-61-7	Diundecyl phthalate	CAS:3648-20-2
Phthalic acid, bis-iso-butyl ester (Di-isobutyl phthalate)	CAS:84-69-5	Phthalic acid, bis-2-ethylhexylester (Bis(2-ethylhexyl)phthala	CAS:117-81-7		

**Solvent:** Ethyl Acetate      **Volume:** ampoule 1 ml      **Concentration (ug/ml):** 10      **Ref.:** F236674

## Water quality

### EN 12673: Standard of 19 components

2-Chlorophenol	CAS:95-57-8	30 ug/ml	2,3,5-Trichlorophenol	CAS:933-78-8	3 ug/ml
3-Chlorophenol	CAS:108-43-0	30 ug/ml	2,3,6-Trichlorophenol	CAS:933-75-5	3 ug/ml
4-Chlorophenol	CAS:106-48-9	30 ug/ml	2,4,5-Trichlorophenol	CAS:95-95-4	3 ug/ml
2,3-Dichlorophenol	CAS:576-24-9	4 ug/ml	2,4,6-Trichlorophenol	CAS:88-06-2	3 ug/ml
2,4-Dichlorophenol	CAS:120-83-2	4 ug/ml	3,4,5-Trichlorophenol	CAS:609-19-8	3 ug/ml
2,5-Dichlorophenol	CAS:583-78-8	4 ug/ml	2,3,4,5-Tetrachlorophenol	CAS:4901-51-3	2 ug/ml
2,6-Dichlorophenol	CAS:87-65-0	4 ug/ml	2,3,4,6-Tetrachlorophenol	CAS:58-90-2	2 ug/ml
3,4-Dichlorophenol	CAS:95-77-2	4 ug/ml	2,3,5,6-Tetrachlorophenol	CAS:935-95-5	2 ug/ml
3,5-Dichlorophenol	CAS:591-35-5	4 ug/ml	Pentachlorophenol	CAS:87-86-5	1 ug/ml
2,3,4-Trichlorophenol	CAS:15950-66-0	3 ug/ml			

**Solvent:** Ethanol      **Volume:** ampoule 1 ml      **Ref.:** F237524

### EN 12673: Stock solution 19 components

2-Chlorophenol	CAS:95-57-8	1000 ug/m	2,3,5-Trichlorophenol	CAS:933-78-8	300 ug/m
3-Chlorophenol	CAS:108-43-0	1000 ug/m	2,3,6-Trichlorophenol	CAS:933-75-5	300 ug/m
4-Chlorophenol	CAS:106-48-9	1000 ug/m	2,4,5-Trichlorophenol	CAS:95-95-4	300 ug/m
2,3-Dichlorophenol	CAS:576-24-9	400 ug/m	2,4,6-Trichlorophenol	CAS:88-06-2	300 ug/m
2,4-Dichlorophenol	CAS:120-83-2	400 ug/m	3,4,5-Trichlorophenol	CAS:609-19-8	300 ug/m
2,5-Dichlorophenol	CAS:583-78-8	400 ug/m	2,3,4,5-Tetrachlorophenol	CAS:4901-51-3	200 ug/m
2,6-Dichlorophenol	CAS:87-65-0	400 ug/m	2,3,4,6-Tetrachlorophenol	CAS:58-90-2	200 ug/m
3,4-Dichlorophenol	CAS:95-77-2	400 ug/m	2,3,5,6-Tetrachlorophenol	CAS:935-95-5	200 ug/m
3,5-Dichlorophenol	CAS:591-35-5	400 ug/m	Pentachlorophenol	CAS:87-86-5	100 ug/m
2,3,4-Trichlorophenol	CAS:15950-66-0	300 ug/m			

**Solvent:** Ethanol      **Volume:** ampoule 1 ml      **Ref.:** F236564



**OPP Standard Solution 19 components (EN 12918)**

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      **Volume:** ampoule 1 ml      **Concentration (ug/ml):** 100      **Ref.:** F128951

**EN 16691: Stock solution 7 components**

Anthracene	CAS:120-12-7	Benzo(k)fluoranthene	CAS:207-08-9	Indeno(1,2,3-c,d)pyrene	CAS:193-39-5
Fluoranthene	CAS:206-44-0	Benzo(a)pyrene	CAS:50-32-8		
Benzo(b)fluoranthene	CAS:205-99-2	Benzo(g,h,i)perylene	CAS:191-24-2		

**Solvent:** Dichloromethane      **Volume:** ampoule 1 ml      **Concentration (ug/ml):** 100      **Ref.:** F236734

**EN 16693: Multi-component stock solution 21 components**

Alachlor	CAS:15972-60-8	4,4'-DDD (TDE)	CAS:72-54-8	Gamma-HCH (Lindane)	CAS:58-89-9
Aldrin	CAS:309-00-2	4,4'-DDE	CAS:72-55-9	Pentachlorobenzene	CAS:608-93-5
Dieldrin	CAS:60-57-1	Hexachlorobenzene	CAS:118-74-1	1,2,3-Trichlorobenzene	CAS:87-61-6
Endrin	CAS:72-20-8	Hexachloro-1,3-butadiene	CAS:87-68-3	1,2,4-Trichlorobenzene	CAS:120-82-1
Isodrin	CAS:465-73-6	Alpha-HCH	CAS:319-84-6	1,3,5-Trichlorobenzene	CAS:108-70-3
2,4'-DDT	CAS:789-02-6	Beta-HCH	CAS:319-85-7	Endosulfan-alpha	CAS:959-98-8
4,4'-DDT	CAS:50-29-3	Delta-HCH	CAS:319-86-8	Endosulfan-beta	CAS:33213-65-9

**Solvent:** Acetone      **Volume:** ampoule 1 ml      **Concentration (ug/ml):** 5      **Ref.:** F236744

**EN 16694: Multicomponent stock solution 6 components**

BDE 28	CAS:41318-75-6	BDE 99	CAS:60348-60-9	BDE 154	CAS:207122-15-4
BDE 47	CAS:5436-43-1	BDE 100	CAS:189084-64-8	BDE 153	CAS:68631-49-2

**Solvent:** Toluene      **Volume:** ampoule 1 ml      **Concentration (ug/ml):** 5      **Ref.:** F236724





# International Regulations



# DIN Standards

## DIN 38407: 16 Nitroaromatic components

Nitrobenzene	CAS:98-95-3	2,4-Dinitrotoluene	CAS:121-14-2	4-Methyl-3-nitroaniline	CAS:119-32-4
2-Nitrotoluene	CAS:88-72-2	2,6-Dinitrotoluene	CAS:606-20-2	4-amino-2, 6-dinitrotoluene	CAS:19406-51-0
4-Nitrotoluene	CAS:99-99-0	3,4-Dinitrotoluene	CAS:610-39-9	2-Amino-4,6-dinitrotoluene	CAS:35572-78-2
1,3-Dinitrobenzene	CAS:99-65-0	2-Methyl-3-nitroaniline	CAS:603-83-8		

**Solvent:** Methanol      **Volume:** ampoule 1 ml      **Concentration (ug/ml):** 500      **Ref.:** F237264

## DIN 38407-3: PCB Mix 17 components

PCB 77	CAS:32598-13-3	PCB 105	CAS:32598-14-4	PCB 156	CAS:38380-08-4
PCB 81	CAS:70362-50-4	PCB 110	CAS:38380-03-9	PCB 157	CAS:69782-90-7
PCB 126	CAS:57465-28-8	PCB 114	CAS:74472-37-0	PCB 167	CAS:52663-72-6
PCB 169	CAS:32774-16-6	PCB 118	CAS:31508-00-6	PCB 170	CAS:35065-30-6
PCB 33	CAS:38444-86-9	PCB 123	CAS:65510-44-3	PCB 189	CAS:39635-31-9
PCB 53	CAS:41464-41-9	PCB 149	CAS:38380-04-0		

**Solvent:** n-Hexane      **Volume:** ampoule 1 ml      **Concentration (ug/ml):** 20      **Ref.:** F237444

## DIN V 38407-11: Pesticide Mix of 21 components

Alachlor	CAS:15972-60-8	Metazachlor	CAS:67129-08-2	Propazine	CAS:139-40-2
Atrazine	CAS:1912-24-9	Metobromuron	CAS:3060-89-7	Sebuthylazine	CAS:7286-69-3
Chlorfenvinphos	CAS:470-90-6	Metolachlor	CAS:51218-45-2	Simazine	CAS:122-34-9
Chlortoluron	CAS:15545-48-9	Metoxuron	CAS:19937-59-8	2,4,5-T	CAS:93-76-5
Cyanazine	CAS:21725-46-2	Monuron	CAS:150-68-5	Terbuthylazine	CAS:5915-41-3
2,4-D	CAS:94-75-7	Parathion	CAS:56-38-2	Trifluralin	CAS:1582-09-8
MCPA	CAS:94-74-6	Pendimethalin	CAS:40487-42-1	Vinclozolin	CAS:50471-44-8

**Solvent:** Acetonitrile      **Volume:** ampoule 1 ml      **Concentration (ug/ml):** 5      **Ref.:** F237544

## DIN 38414-20: Stock solution of 6 components

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

**Solvent:** n-Hexane      **Volume:** ampoule 1 ml      **Concentration (ug/ml):** 10      **Ref.:** F236954

## DIN 38407-22 Glyphosate and AMPA

Glyphosate	CAS:1071-83-6	Aminomethyl phosphonic acid	CAS:1066-51-9
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**Solvent:** Water      **Volume:** ampoule 1 ml      **Concentration (ug/ml):** 100      **Ref.:** F237224

## DIN 38414-23 PAHs 15 components

Naphthalene	CAS:91-20-3	Fluoranthene	CAS:206-44-0	Benzo(k)fluoranthene	CAS:207-08-9
Acenaphthene	CAS:83-32-9	Pyrene	CAS:129-00-0	Benzo(a)pyrene	CAS:50-32-8
Fluorene	CAS:86-73-7	Benzo(a)anthracene	CAS:56-55-3	Dibenzo(a,h)anthracene	CAS:53-70-3
Phenanthrene	CAS:85-01-8	Chrysene	CAS:218-01-9	Benzo(g,h,i)perylene	CAS:191-24-2
Anthracene	CAS:120-12-7	Benzo(b)fluoranthene	CAS:205-99-2	Indeno(1,2,3-c,d)pyrene	CAS:193-39-5

**Solvent:** Acetonitrile      **Volume:** ampoule 1 ml      **Concentration (ug/ml):** 10      **Ref.:** F237214



# Italian Environmental Regulation

## Method DM 471 PAH Standard - 13 components

Benzo(a)pyrene	CAS:50-32-8	Chrysene	CAS:218-01-9	Dibenzo(a,i)pyrene	CAS:189-55-9
Benzo(b)fluoranthene	CAS:205-99-2	Dibenzo(a,h)anthracene	CAS:53-70-3	Dibenzo(a,h)pyrene	CAS:189-64-0
Benzo(g,h,i)perylene	CAS:191-24-2	Indeno(1,2,3-c,d)pyrene	CAS:193-39-5	Dibenzo(a,l)pyrene	CAS:191-30-0
Benzo(a)anthracene	CAS:56-55-3	Pyrene	CAS:129-00-0		
Benzo(k)fluoranthene	CAS:207-08-9	Dibenzo(a,e)pyrene	CAS:192-65-4		

**Solvent:** Acetonitrile      **Volume:** ampoule 1 ml      **Concentration (ug/ml):** 10      **Ref.:** F872021

## Method DM 471 Pesticide Standard - 15 components

Alachlor	CAS:15972-60-8	Gamma-HCH (Lindane)	CAS:58-89-9	4,4'-DDE	CAS:72-55-9
Aldrin	CAS:309-00-2	Chlordane (technical)	CAS:57-74-9	2,4'-DDT	CAS:789-02-6
Atrazine	CAS:1912-24-9	2,4'-DDD	CAS:53-19-0	4,4'-DDT	CAS:50-29-3
Alpha-HCH	CAS:319-84-6	4,4'-DDD (TDE)	CAS:72-54-8	Dieldrin	CAS:60-57-1
Beta-HCH	CAS:319-85-7	2,4'-DDE	CAS:3424-82-6	Endrin	CAS:72-20-8

**Solvent:** Acetone      **Volume:** ampoule 1 ml      **Concentration (ug/ml):** 100      **Ref.:** F872031

## Method DM 471 Standard Mixture 1 - 8 components

Benzene	CAS:71-43-2	Methyl-tert.butylether (MTBE)	CAS:1634-04-4	m-Xylene	CAS:108-38-3
Ethylbenzene	CAS:100-41-4	Toluene	CAS:108-88-3	p-Xylene	CAS:106-42-3
Styrene	CAS:100-42-5	o-Xylene	CAS:95-47-6		

**Solvent:** Methanol      **Volume:** ampoule 1 ml      **Concentration (ug/ml):** 1000      **Ref.:** F871941

## Method DM 471 Standard Mixture 3 - 7 components

Aniline	CAS:62-53-3	p-Toluidine	CAS:106-49-0	4-Anisidine	CAS:104-94-9
Diphenylamine	CAS:122-39-4	o-Anisidine	CAS:90-04-0		
o-Toluidine	CAS:95-53-4	3-Anisidine	CAS:536-90-3		

**Solvent:** Methanol      **Volume:** ampoule 1 ml      **Concentration (ug/ml):** 10      **Ref.:** F871961

## Method DM 471 Standard Mixture 4 - 8 components

n-Pentane	CAS:109-66-0	n-Octane	CAS:111-65-9	n-Undecane	CAS:1120-21-4
n-Hexane	CAS:110-54-3	n-Nonane	CAS:111-84-2	n-Dodecane	CAS:112-40-3
n-Heptane	CAS:142-82-5	n-Decane	CAS:124-18-5		

**Solvent:** Methanol      **Volume:** ampoule 1 ml      **Concentration (ug/ml):** 500      **Ref.:** F871971

## Method DM 471 Standard Mixture 5 - 7 components

Aniline	CAS:62-53-3	p-Toluidine	CAS:106-49-0	4-Anisidine	CAS:104-94-9
Diphenylamine	CAS:122-39-4	o-Anisidine	CAS:90-04-0		
o-Toluidine	CAS:95-53-4	3-Anisidine	CAS:536-90-3		

**Solvent:** Methanol      **Volume:** ampoule 1 ml      **Concentration (ug/ml):** 100      **Ref.:** F871981

## Method DM 471 Standard Mixture 6 - 8 components

Chlorobenzene	CAS:108-90-7	1,4-Dichlorobenzene	CAS:106-46-7	Pentachlorobenzene	CAS:608-93-5
1,2-Dichlorobenzene	CAS:95-50-1	1,2,4-Trichlorobenzene	CAS:120-82-1	Hexachlorobenzene	CAS:118-74-1
1,3-Dichlorobenzene	CAS:541-73-1	1,2,4,5-Tetrachlorobenzene	CAS:95-94-3		

**Solvent:** Methanol      **Volume:** ampoule 1 ml      **Concentration (ug/ml):** 100      **Ref.:** F871991

**Method DM 471 Standard Mixture 7 - 9 components**

2-Chlorophenol	CAS:95-57-8	2,4,6-Trichlorophenol	CAS:88-06-2	2-Methylphenol (o-Cresol)	CAS:95-48-7
4-Chlorophenol	CAS:106-48-9	Pentachlorophenol	CAS:87-86-5	3-Methylphenol (m-Cresol)	CAS:108-39-4
2,4-Dichlorophenol	CAS:120-83-2	Phenol	CAS:108-95-2	4-Methylphenol (p-Cresol)	CAS:106-44-5

**Solvent:** Methanol      **Volume:** ampoule 1 ml      **Concentration (ug/ml):** 100      **Ref.:** F872051

**Method DM 471 Standard Mixture 8 - 14 components**

Chloromethane	CAS:74-87-3	1,1-Dichloroethane	CAS:75-34-3	1,2-Dibromoethane	CAS:106-93-4
Chloroform	CAS:67-66-3	cis-1,2-Dichloroethene	CAS:156-59-2	Dibromochloromethane	CAS:124-48-1
Vinylchloride	CAS:75-01-4	trans-1,2-Dichloroethene	CAS:156-60-5	Bromodichloromethane	CAS:75-27-4
1,2-Dichloroethane	CAS:107-06-2	Dichloromethane	CAS:75-09-2	1,2-Dichloropropane	CAS:78-87-5
1,1-Dichloroethene	CAS:75-35-4	Tribromomethane (Bromoform)	CAS:75-25-2		

**Solvent:** Methanol      **Volume:** ampoule 1 ml      **Concentration (ug/ml):** 100      **Ref.:** F872001

**Method DM 471 Standard Mixture 9 - 6 components**

Nitrobenzene	CAS:98-95-3	1,3-Dinitrobenzene	CAS:99-65-0	1-Chloro-3-nitrobenzene	CAS:121-73-3
1,2-Dinitrobenzene	CAS:528-29-0	1-Chloro-2-nitrobenzene	CAS:88-73-3	1-Chloro-4-nitrobenzene	CAS:100-00-5

**Solvent:** Methanol      **Volume:** ampoule 1 ml      **Concentration (ug/ml):** 100      **Ref.:** F872041

**Method DM 471 Standard Mixture 10 - 7 components**

1,1,2-Trichloroethane	CAS:79-00-5	1,1,2,2-Tetrachloroethane	CAS:79-34-5	1,1,1-Trichloroethane	CAS:71-55-6
Trichloroethene	CAS:79-01-6	Tetrachloroethene	CAS:127-18-4		
1,2,3-Trichloropropane	CAS:96-18-4	Hexachloro-1,3-butadiene	CAS:87-68-3		

**Solvent:** Methanol      **Volume:** ampoule 1 ml      **Concentration (ug/ml):** 100      **Ref.:** F872011



The logo for CPAchem features the text "CPAchem" in a bold, sans-serif font. The text is white and is set against a dark orange, horizontally-oriented oval shape that tapers at both ends. The background of the entire page is a solid orange color.

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