



## EPA METHOD 600 SERIES

### Analysis of Organic Compounds in Industrial and Municipal Waste Water Discharges

The 600 series methods are designed for monitoring organic pollutants in industrial and municipal discharges under the Clean Water Act (see 40 CFR 136.1). In addition, the Non-Conventional Pesticides Methods are also included in this section. The 600 series methods may be obtained from ULTRA Scientific in the publication Methods for the Determination of Organic Compounds in Industrial and Municipal Wastewater Discharges. All of the individual 600 series methods are available on our website.

ULTRA Scientific has prepared a series of reference standards for the 600 series methods, as well as the necessary surrogate and internal standards. Each component in a reference standard is pre-analyzed, with most analytes being >99% pure, and the solvents are of the highest quality available. All solutions are gravimetrically prepared to a precision of  $\pm 2.0\%$ . A Level II – ISO Guide 34 Reference Material Certificate of Analysis is available for each product.

Find additional EPA Method 600 Series Standards online at [www.ultrasci.com/EPA600](http://www.ultrasci.com/EPA600)

EPA METHOD	PAGE	EPA METHOD	PAGE
● EPA METHOD 601	192	● EPA METHOD 613	213
● EPA METHOD 602	197	● EPA METHOD 614, 614.1	213
● EPA METHOD 603	198	● EPA METHOD 615	214
● EPA METHOD 604	199	● EPA METHOD 619	216
● EPA METHOD 605	201	● EPA METHOD 622	216
● EPA METHOD 606	201	● EPA METHOD 624	217
● EPA METHOD 607	202	● EPA METHOD 625	224
● EPA METHOD 608, 608.1, 608.2	203	● EPA METHOD 632	235
● EPA METHOD 609	207	● EPA METHOD 632.1	235
● EPA METHOD 610	208	● EPA METHOD 633	235
● EPA METHOD 611	212	● EPA METHOD 680	237
● EPA METHOD 612	212		

## EPA METHOD 601

PURGEABLE  
HALOCARBONS

Method 601 is a purge and trap method for determining purgeable halocarbons using an electrolytic conductivity (Hall) detector.

To read the complete method, log onto our website at [www.ultrasci.com](http://www.ultrasci.com).

## Recommended Standards

Calibration Standards: HCM-601-1  
HC-070-1

Surrogate Standard: STM-290N-1

## Technical Note

2-Chloroethyl vinyl ether is stable in solution by itself, but breaks down in the presence of other halocarbons. That is why ULTRA packages this analyte as a single component solution. If you prepare a working standard that contains 2-chloroethyl vinyl ether mixed with other halocarbons, be sure to monitor the stability of this analyte.

Recommended Method 601  
Purgeable Halocarbon Mixture

28 Analytes

bromodichloromethane  
bromoform  
bromomethane  
carbon tetrachloride  
chlorobenzene  
chloroethane  
chloroform  
chloromethane  
1,2-dichlorobenzene  
1,3-dichlorobenzene  
1,4-dichlorobenzene  
1,1-dichloroethane  
1,2-dichloroethane  
1,1-dichloroethene  
trans-1,2-dichloroethene  
1,2-dichloropropane  
cis-1,3-dichloropropene  
trans-1,3-dichloropropene  
dibromochloromethane  
dichlorodifluoromethane  
methylene chloride  
tetrachloroethene  
1,1,2,2-tetrachloroethane  
1,1,1-trichloroethane  
1,1,2-trichloroethane  
trichloroethene  
trichlorofluoromethane  
vinyl chloride

@ 100 µg/mL in methanol

**HCM-601-1**

**1 x 1 mL**

Recommended Method 601  
2-Chloroethyl Vinyl Ether Standards

2-chloroethyl vinyl ether

@ 100 µg/mL in methanol

**HC-070-1**

**1 x 1 mL**

@ 5000 µg/mL in methanol

**EPA-1016-1**

**1 x 1 mL**

## Purgeable Gas Mixture

5 Analytes

bromomethane  
chloroethane  
chloromethane  
dichlorodifluoromethane  
vinyl chloride

@ 100 µg/mL in methanol

**HCM-601G-1**

**1 x 1 mL**

Recommended Method 601  
Surrogate Standard Mixture

3 Analytes

bromochloromethane  
2-bromo-1-chloropropane  
1,4-dichlorobutane

@ 2000 µg/mL in methanol

**STM-290N-1**

**1 x 1 mL**

@ 20,000 µg/mL in methanol

**STM-291-1**

**1 x 1 mL**

## Individual Internal &amp; Surrogate Standards for Method 601

All @ 2000 µg/mL in methanol

**1 x 1 mL Ampules**

bromochloromethane

STS-180-1

2-bromo-1-chloropropane

STS-190-1

1,4-dichlorobutane

STS-200-1

(continued on next page)

**Purgeable Halocarbons & Aromatics Mix****25 Analytes**

benzene  
 bromodichloromethane  
 bromoform  
 carbon tetrachloride  
 chlorobenzene  
 chloroform  
 1,2-dichlorobenzene  
 1,3-dichlorobenzene  
 1,4-dichlorobenzene  
 1,1-dichloroethane  
 1,2-dichloroethane  
 1,1-dichloroethene  
 trans-1,2-dichloroethene  
 1,2-dichloropropane  
 cis-1,3-dichloropropene  
 trans-1,3-dichloropropene  
 dibromochloromethane  
 ethylbenzene  
 methylene chloride  
 1,1,2,2-tetrachloroethane  
 tetrachloroethene  
 toluene  
 1,1,1-trichloroethane  
 1,1,2-trichloroethane  
 trichloroethene

@ 200 µg/mL in methanol

**HCM-621-1****1 x 1 mL****Volatiles Mix 1 (VOA-1)****11 Analytes**

carbon tetrachloride  
 chlorobenzene  
 1,3-dichlorobenzene  
 1,4-dichlorobenzene  
 1,2-dichloroethane  
 1,1-dichloroethene  
 trans-1,2-dichloroethene  
 1,2-dichloropropane  
 ethylbenzene  
 tetrachloroethene  
 1,1,2-trichloroethane

@ 50 µg/mL in methanol

**EPA-2041N-1****1 x 1 mL**

@ 500 µg/mL in methanol

**EPA-2141N-1****1 x 1 mL****Volatiles Mix 2 (VOA-2)****12 Analytes**

benzene  
 bromodichloromethane  
 bromoform  
 chloroform  
 dibromochloromethane  
 1,2-dichlorobenzene  
 1,1-dichloroethane  
 methylene chloride  
 1,1,2,2-tetrachloroethane  
 toluene  
 1,1,1-trichloroethane  
 trichloroethene

@ 50 µg/mL in methanol

**EPA-2042N-1****1 x 1 mL**

@ 500 µg/mL in methanol

**EPA-2142N-1****1 x 1 mL****Purgeable Halocarbon Kit****Kit – contains thirty ampules:**

1 x 1 mL of each individual component  
 @ 100 µg/mL in methanol:

bromodichloromethane  
 bromoform  
 bromomethane  
 carbon tetrachloride  
 chlorobenzene  
 chloroethane  
 2-chloroethylvinyl ether  
 chloroform  
 chloromethane  
 dibromochloromethane  
 1,2-dichlorobenzene  
 1,3-dichlorobenzene  
 1,4-dichlorobenzene  
 dichlorodifluoromethane  
 1,1-dichloroethane  
 1,2-dichloroethane  
 1,1-dichloroethene  
 trans-1,2-dichloroethene  
 1,2-dichloropropane  
 cis-1,3-dichloropropene  
 trans-1,3-dichloropropene  
 methylene chloride  
 1,1,2,2-tetrachloroethane  
 tetrachloroethene  
 1,1,1-trichloroethane  
 1,1,2-trichloroethane  
 trichloroethene  
 trichlorofluoromethane  
 vinyl chloride  
 plus  
 Purgeable Halocarbons Mixture  
 (HCM-601-1)

**HCK-601****Kit****Volume discounts for individual solutions**

Order 4–19 ampules of the same item and receive a **20% DISCOUNT**  
 Order 20 or more ampules of the same item and receive a **30% DISCOUNT**



## EPA METHOD 601

(continued)

**Purgeable Gas Mixture**

6 Analytes

bromomethane  
 chloroethane  
 chloromethane  
 dichlorodifluoromethane  
 trichlorofluoromethane  
 vinyl chloride

@ 200 µg/mL in methanol

**DWM-584-1** 1 x 1 mL

@ 2000 µg/mL in methanol

**DWM-544-1** 1 x 1 mL**Performance Check Mixture**

8 Analytes

benzene  
 carbon tetrachloride  
 1,4-dichlorobenzene  
 1,2-dichloroethane  
 1,1-dichloroethene  
 1,1,1-trichloroethane  
 trichloroethene  
 vinyl chloride

@ 200 µg/mL in methanol

**EPA-100-1** 1 x 1 mL**Purgeable Halocarbons Mixture**

7 Analytes

chloroform  
 1,1-dichloroethane  
 trans-1,2-dichloroethene  
 methylene chloride  
 1,1,1-trichloroethane  
 trichloroethene  
 vinyl chloride

@ 200 µg/mL in methanol

**DWM-720-1** 1 x 1 mL**Calibration Mixture**

12 Analytes

benzene  
 carbon tetrachloride  
 chlorobenzene  
 2-chloroethylvinyl ether  
 dibromochloromethane  
 1,1-dichloroethane  
 1,1-dichloroethene  
 1,2-dichloropropane  
 methylene chloride  
 1,1,2-trichloroethane  
 tetrachloroethene  
 trichloroethene

@ 2000 µg/mL in methanol

**US-430-1** 1 x 1 mL**Calibration Mixture**

14 Analytes

bromodichloromethane  
 bromoform  
 chloroform  
 1,2-dichlorobenzene  
 1,3-dichlorobenzene  
 1,4-dichlorobenzene  
 1,2-dichloroethane  
 trans-1,2-dichloroethene  
 cis-1,3-dichloropropene  
 trans-1,3-dichloropropene  
 ethylbenzene  
 1,1,2,2-tetrachloroethane  
 1,1,1-trichloroethane  
 toluene

@ 2000 µg/mL in methanol

**US-425-1** 1 x 1 mL**Volatile Halocarbons Mixture**

11 Analytes

bromodichloromethane  
 bromoform  
 carbon tetrachloride  
 chlorobenzene  
 chloroform  
 dibromochloromethane  
 1,2-dichloroethane  
 methylene chloride  
 tetrachloroethene  
 1,1,1-trichloroethane  
 trichloroethene

@ 100 µg/mL in methanol

**DWM-735-1** 1 x 1 mL**2-Chloroethylvinyl Ether Solution**

2-chloroethylvinyl ether

@ 2000 µg/mL in methanol

**HC-072-1** 1 x 1 mL**Volume discounts for individual solutions**

Order 4–19 ampules of the same item and receive a **20% DISCOUNT**  
 Order 20 or more ampules of the same item and receive a **30% DISCOUNT**



## EPA METHOD 601

(continued)

**Purgeable Halocarbon Mixture**

## 24 Analytes

bromoform  
 bromodichloromethane  
 bromomethane  
 carbon tetrachloride  
 chlorobenzene  
 2-chloroethylvinyl ether  
 chloroform  
 dibromochloromethane  
 1,2-dichlorobenzene  
 1,3-dichlorobenzene  
 1,4-dichlorobenzene  
 1,1-dichloroethane  
 1,2-dichloroethane  
 1,1-dichloroethene  
 trans-1,2-dichloroethene  
 1,2-dichloropropane  
 cis-1,3-dichloropropene  
 trans-1,3-dichloropropene  
 methylene chloride  
 1,1,2,2-tetrachloroethane  
 tetrachloroethene  
 1,1,1-trichloroethane  
 1,1,2-trichloroethane  
 trichloroethene

@ 2000 µg/mL in methanol

**HCM-600-1****1 x 1 mL****Purgeable Halocarbon Mixture**

## 18 Analytes

carbon tetrachloride  
 chlorobenzene  
 1,2-dichlorobenzene  
 1,4-dichlorobenzene  
 1,3-dichlorobenzene  
 1,1-dichloroethane  
 1,2-dichloroethane  
 trans-1,2-dichloroethene  
 1,1-dichloroethene  
 1,2-dichloropropane  
 cis-1,3-dichloropropene  
 trans-1,3-dichloropropene  
 methylene chloride  
 1,1,2,2-tetrachloroethane  
 tetrachloroethene  
 1,1,1-trichloroethane  
 1,1,2-trichloroethane  
 trichloroethene

@ 200 µg/mL in methanol

**HCM-605-1****1 x 1 mL**

@ 2000 µg/mL in methanol

**HCM-610-1****1 x 1 mL****Purgeable Halocarbon Mixture**

## 23 Analytes

bromoform  
 carbon tetrachloride  
 chlorobenzene  
 2-chloroethylvinyl ether  
 chloroform  
 bromodichloromethane  
 dibromochloromethane  
 1,2-dichlorobenzene  
 1,3-dichlorobenzene  
 1,4-dichlorobenzene  
 1,1-dichloroethane  
 1,2-dichloroethane  
 trans-1,2-dichloroethene  
 1,1-dichloroethene  
 1,2-dichloropropane  
 cis-1,3-dichloropropene  
 trans-1,3-dichloropropene  
 methylene chloride  
 1,1,2,2-tetrachloroethane  
 tetrachloroethene  
 1,1,1-trichloroethane  
 1,1,2-trichloroethane  
 trichloroethene

@ 200 µg/mL in methanol

**HCM-615-1****1 x 1 mL****Target Analytes Mixture**

## 26 Analytes

benzene  
 carbon tetrachloride  
 chlorobenzene  
 ethylbenzene  
 methyl tert-butyl ether (MTBE)  
 methylene chloride  
 tetrachloroethene  
 toluene  
 trichloroethene  
 1,2-dichlorobenzene  
 1,3-dichlorobenzene  
 1,4-dichlorobenzene  
 1,1-dichloroethane

@ 200 µg/mL in methanol

**HCM-625-1****1 x 1 mL**

1,2-dichloroethane  
 1,1-dichloroethene  
 cis-1,2-dichloroethene  
 trans-1,2-dichloroethene  
 1,2-dichloropropane  
 cis-1,3-dichloropropene  
 trans-1,3-dichloropropene  
 1,1,2,2-tetrachloroethane  
 1,1,1-trichloroethane  
 1,1,2-trichloroethane  
 o-xylene  
 m-xylene  
 p-xylene

## EPA METHOD 601

(continued)

**Target Analytes Mixture**

26 Analytes

benzene  
 carbon tetrachloride  
 chlorobenzene  
 1,2-dichlorobenzene  
 1,3-dichlorobenzene  
 1,4-dichlorobenzene  
 1,1-dichloroethane  
 1,2-dichloroethane  
 1,1-dichloroethene  
 cis-1,2-dichloroethene  
 trans-1,2-dichloroethene  
 1,2-dichloropropane  
 cis-1,3-dichloropropene  
 trans-1,3-dichloropropene  
 ethylbenzene  
 methyl tert-butyl ether (MTBE)  
 methylene chloride  
 tetrachloroethene  
 toluene  
 trichloroethene  
 1,1,2,2-tetrachloroethane  
 1,1,1-trichloroethane  
 1,1,2-trichloroethane  
 o-xylene  
 m-xylene  
 p-xylene

@ 2000 µg/mL in methanol

**HCM-630-1****1 x 1 mL****Purgeable Halocarbon & Aromatic Mixture**

35 Analytes

benzene  
 bromodichloromethane  
 bromoform  
 bromomethane  
 carbon tetrachloride  
 chlorobenzene  
 chloroethane  
 chloroform  
 chloromethane  
 dibromochloromethane  
 1,2-dichlorobenzene  
 1,3-dichlorobenzene  
 1,4-dichlorobenzene  
 dichlorodifluoromethane  
 1,1-dichloroethane  
 1,2-dichloroethane  
 1,1-dichloroethene  
 trans-1,2-dichloroethene  
 dichloromethane  
 1,2-dichloropropane  
 cis-1,3-dichloropropene  
 trans-1,3-dichloropropene  
 ethylbenzene  
 MTBE  
 o-xylene  
 m-xylene  
 p-xylene  
 tetrachloroethene  
 toluene  
 1,1,2,2-tetrachloroethane  
 1,1,1-trichloroethane  
 1,1,2-trichloroethane  
 trichloroethene  
 trichlorofluoromethane  
 vinyl chloride

@ 100 µg/mL in methanol

**PMX-115-1****1 x 1 mL****Purgeable Mixture**

23 Analytes

bromodichloromethane  
 bromoform  
 carbon tetrachloride  
 chlorobenzene  
 chloroform  
 2-chloroethylvinyl ether  
 dibromochloromethane  
 1,2-dichlorobenzene  
 1,3-dichlorobenzene  
 1,4-dichlorobenzene  
 1,1-dichloroethane  
 1,2-dichloroethane  
 1,1-dichloroethene  
 trans-1,2-dichloroethene  
 1,2-dichloropropane  
 cis-1,3-dichloropropene  
 trans-1,3-dichloropropene  
 methylene chloride  
 tetrachloroethene  
 1,1,2,2-tetrachloroethane  
 1,1,1-trichloroethane  
 1,1,2-trichloroethane  
 trichloroethene

@ 2000 µg/mL in methanol

**PMX-165-1****1 x 1 mL****Trihalomethanes Mixture**

4 Analytes

bromodichloromethane  
 bromoform  
 chloroform  
 dibromochloromethane

@ 200 µg/mL in methanol

**THM-511-1****1 x 1 mL**

@ 2000 µg/mL in methanol

**THM-515-1****1 x 1 mL****Volume discounts for individual solutions**

Order 4–19 ampules of the same item and receive a **20% DISCOUNT**  
 Order 20 or more ampules of the same item and receive a **30% DISCOUNT**



## EPA METHOD 602

## PURGEABLE AROMATICS

Method 602 is a purge and trap method for determining purgeable aromatics, using a PID.

To read the complete method, log onto our website at [www.ultrasci.com](http://www.ultrasci.com).

## Recommended Standards

Calibration Standard: AMM-602N-1

Internal &  
Surrogate Standard: STS-220N-1

Recommended Method 602  
Purgeable Aromatics Mixture

## 7 Analytes

1,2-dichlorobenzene  
1,3-dichlorobenzene  
1,4-dichlorobenzene  
benzene  
chlorobenzene  
ethylbenzene  
toluene

@ 100 µg/mL in methanol

**AMM-602N-1** 1 x 1 mL

@ 200 µg/mL in methanol

**AMM-603-1** 1 x 1 mL

@ 2000 µg/mL in methanol

**AMM-604-1** 1 x 1 mL

Recommended  
Internal and Surrogate Standard

alpha,alpha,alpha-trifluorotoluene

@ 200 µg/mL in methanol

**STS-221-1** 1 x 1 mL

@ 2000 µg/mL in methanol

**STS-220N-1** 1 x 1 mL

@ 20000 µg/mL in methanol

**STS-222-1** 1 x 1 mL

## Target Analytes Mixture

## 26 Analytes

benzene  
carbon tetrachloride  
chlorobenzene  
1,2-dichlorobenzene  
1,3-dichlorobenzene  
1,4-dichlorobenzene  
1,1-dichloroethane  
1,2-dichloroethane  
1,1-dichloroethene  
cis-1,2-dichloroethene  
trans-1,2-dichloroethene  
1,2-dichloropropane  
cis-1,3-dichloropropene  
trans-1,3-dichloropropene  
ethylbenzene  
methylene chloride  
methyl tert-butyl ether (MTBE)  
1,1,1-trichloroethane  
1,1,2-trichloroethane  
1,1,2,2-tetrachloroethane  
tetrachloroethene  
toluene  
trichloroethene  
o-xylene  
m-xylene  
p-xylene

@ 200 µg/mL in methanol

**HCM-625-1** 1 x 1 mL

@ 2000 µg/mL in methanol

**HCM-630-1** 1 x 1 mL

## Purgeable Aromatics Mixtures

## 11 Analytes

benzene  
chlorobenzene  
1,2-dichlorobenzene  
1,3-dichlorobenzene  
1,4-dichlorobenzene  
ethylbenzene  
methyl tert-butyl ether  
toluene  
o-xylene  
m-xylene  
p-xylene

@ 200 µg/mL in methanol

**AMM-622-1** 1 x 1 mL

@ 2000 µg/mL in methanol

**SCA-100-1** 1 x 1 mL

## Purgeable Aromatics Kit

## Kit – contains eight ampules:

1 x 1 mL of each individual component

@ 100 µg/mL in methanol:

benzene  
chlorobenzene  
1,2-dichlorobenzene  
1,3-dichlorobenzene  
1,4-dichlorobenzene  
ethylbenzene  
toluene  
plus

Purgeable Aromatics Mixture  
(AMM-602N-1)

**AMK-602**

**Kit**

## EPA METHOD 603

ACROLEIN AND  
ACRYLONITRILE

Method 603 is a purge and trap method for determining acrolein and acrylonitrile, using a flame ionization detector.

To read the complete method, log onto our website at [www.ultrasci.com](http://www.ultrasci.com).

## Recommended Standards

Calibration Standard: AMN-603-1

Technical Note: Acrolein  
Standards

Acrolein is known to undergo polymerization with time. ULTRA prepares the standards which contain acrolein every month to ensure the accuracy of each standard's certified values. These standards are assigned expiration dates of three months. ULTRA strongly recommends that these standards be used as soon as possible after receipt.

Recommended Method 603  
Acrolein-Acrylonitrile Mixtures

2 Analytes (see tech note)

acrolein  
acrylonitrile

@ 100 µg/mL in methanol

**AMN-603-1** 1 x 1 mL

@ 2000 µg/mL in methanol

**AMN-623-1** 1 x 1 mL

Acrolein-Acrylonitrile  
Mixtures in Water

2 Analytes (see tech note)

acrolein  
acrylonitrile

@ 1000 µg/mL in water

**AMN-613-1** 1 x 1 mL

@ 10,000 µg/mL in water

**AMN-803-1** 1 x 1 mL

## Acrolein Standard

acrolein

@ 5000 µg/mL in methanol

**AM-171-1** 1 x 1 mL

## Acrolein Standard

acrolein

@ 5000 µg/mL in water

**AM-173-1** 1 x 1 mL

## Acrylonitrile Solution

acrylonitrile

@ 1000 µg/mL in water

**AM-181-1** 1 x 1 mL

## Acrylonitrile Solution

acrylonitrile

@ 2000 µg/mL in methanol

**AM-182-1** 1 x 1 mL

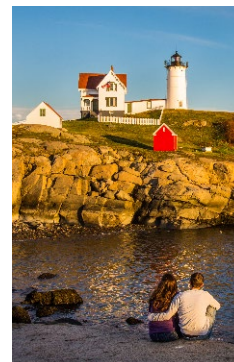
## WWW.ULTRASCI.COM

## Download and Print from Our Online Library

The ULTRA Scientific website allows you to easily obtain up-to-date documents that are related not only to our business, but to the industry in general.

## Choose from:

- ✓ ULTRA Scientific catalog
- ✓ ULTRA Scientific brochures
- ✓ SDS's (GHS compliant)
- ✓ EPA Methods
- ✓ And more!





## EPA METHOD 604

## PHENOLS

Method 604 is used to determine phenols. Samples are extracted, then concentrated in a Kuderna-Danish apparatus. Quantitation is by GC/FID, or the extract is derivatized and determined on GC/ECD.

To read the complete method, log onto our website at [www.ultrasci.com](http://www.ultrasci.com).

## Recommended Standards

Calibration Standards: US-107N-1  
EPA-2008N-1

Internal &  
Surrogate Standards: IST-251-1  
IST-261-1  
IST-271-1

## Technical Note

Phenols are subject to absorption on the active sites of GC columns. The more acidic phenols, such as 2,4-dinitrophenol, will chromatograph poorly leading to poor quantitation.

## Phenols Kit

## Kit – contains twelve ampules:

1 x 1 mL of 11 individual components  
and 1 mix

@ 100 µg/mL in methanol:

4-chloro-3-methylphenol  
2-chlorophenol  
2,4-dichlorophenol  
2,4-dimethylphenol  
2,4-dinitrophenol ( 1000 µg/mL)  
4,6-dinitro-2-methylphenol (1000 µg/mL)  
2-nitrophenol  
4-nitrophenol  
pentachlorophenol (1000 µg/mL)  
phenol  
2,4,6-trichlorophenol  
Phenols Mixture (EPA-2008N-1)

**PHK-604A**

**Kit**

## Acids Surrogate Standard Mixture

## 3 Analytes

2-fluorophenol  
phenol-d5  
2,4,6-tribromophenol

@ 2000 µg/mL in methanol

**ISM-290N-1** 1 x 1 mL

Recommended Method 604  
Phenols Mixtures

## 11 Analytes

4-chloro-3-methylphenol  
2-chlorophenol  
2,4-dichlorophenol  
2,4-dimethylphenol  
2,4-dinitrophenol  
2-methyl-4,6-dinitrophenol  
2-nitrophenol  
4-nitrophenol  
pentachlorophenol  
phenol  
2,4,6-trichlorophenol

@ 2000 µg/mL in methylene chloride

**US-107N-1** 1 x 1 mL

@ 100 µg/mL in methanol

**EPA-2008N-1** 1 x 1 mL

@ 20 µg/mL in methanol

**PHM-604-1** 1 x 1 mL

@ 500 µg/mL in methanol

**PHM-624-1** 1 x 1 mL

@ 100 µg/mL in acetonitrile

**PHM-610-1** 1 x 10 mL

@ 1000 µg/mL in methanol

**PHM-625-1** 1 x 1 mL

@ 1000 µg/mL in acetonitrile

**PHM-630-1** 1 x 1 mL

@ 2000 µg/mL in methanol

**PHM-635-1** 1 x 1 mL

## Recommended Internal &amp; Surrogate Standards for Method 604

All @ 200 µg/mL in methanol 1 x 1 mL Ampules

2,4,6-tribromophenol ATS-182-1

All @ 2000 µg/mL in methanol 1 x 1 mL Ampules

2-fluorophenol IST-251-1

pentafluorophenol IST-261-1

phenol-d<sub>5</sub> IST-271-1

2,4,6-tribromophenol ATS-181-1

## EPA METHOD 604

(continued)

## Phenols Mixture

## 11 Analytes

4-chloro-3-methylphenol	2500 µg/mL
2-chlorophenol	500 µg/mL
2,4-dichlorophenol	500 µg/mL
2,4-dimethylphenol	500 µg/mL
2,4-dinitrophenol	1500 µg/mL
4,6-dinitro-2-methylphenol	2500 µg/mL
2-nitrophenol	500 µg/mL
4-nitrophenol	2500 µg/mL
pentachlorophenol	2500 µg/mL
phenol	600 µg/mL
2,4,6-trichlorophenol	500 µg/mL

in methanol

**XY-0126-1** 1 x 1 mL

## Phenols Mixture

## 11 Analytes

4-chloro-3-methylphenol	2500 µg/mL
2-chlorophenol	500 µg/mL
2,4-dichlorophenol	500 µg/mL
2,4-dimethylphenol	500 µg/mL
2,4-dinitrophenol	1500 µg/mL
2-methyl-4,6-dinitrophenol	2500 µg/mL
2-nitrophenol	50 µg/mL
4-nitrophenol	2500 µg/mL
pentachlorophenol	2500 µg/mL
phenol	500 µg/mL
2,4,6-trichlorophenol	1500 µg/mL

in methanol

**PHM-615-1** 1 x 1 mL

## Phenols Mixture

## 12 Analytes

4-chloro-3-methylphenol
2-chlorophenol
2,4-dichlorophenol
2,4-dimethylphenol
2,4-dinitrophenol
2-methyl-4,6-dinitrophenol
2-nitrophenol
4-nitrophenol
nonylphenol
pentachlorophenol
phenol
2,4,6-trichlorophenol

@ 2000 µg/mL in methylene chloride

**PHM-640-1** 1 x 1 mL

## Phenols Mixture

## 11 Analytes

4-chloro-3-methylphenol	5000 µg/mL
2-chlorophenol	5000 µg/mL
2,4-dichlorophenol	5000 µg/mL
2,4-dimethylphenol	5000 µg/mL
2,4-dinitrophenol	10000 µg/mL
2-methyl-4,6-dinitrophenol	10000 µg/mL
2-nitrophenol	5000 µg/mL
4-nitrophenol	10000 µg/mL
pentachlorophenol	10000 µg/mL
phenol	5000 µg/mL
2,4,6-trichlorophenol	5000 µg/mL

in methanol

**XY-0110-1** 1 x 1 mL

## Phenols Mixture

## 11 Analytes

4-chloro-3-methylphenol	2500 µg/mL
2-chlorophenol	500 µg/mL
2,4-dichlorophenol	500 µg/mL
2,4-dimethylphenol	500 µg/mL
2,4-dinitrophenol	1500 µg/mL
2-methyl-4,6-dinitrophenol	2500 µg/mL
2-nitrophenol	500 µg/mL
4-nitrophenol	2500 µg/mL
pentachlorophenol	2500 µg/mL
phenol	500 µg/mL
2,4,6-trichlorophenol	1500 µg/mL

in methanol

**XY-0108-1** 1 x 1 mL

in methylene chloride

**XY-0112-1** 1 x 1 mL

## ORDERING IS EASY

## Online

www.ultrasci.com  
ultra@ultrasci.com

## Phone

800-338-1754  
Monday – Friday  
8:30 a.m. - 5:00 p.m. ET

## Fax

401-295-2330

## Mail

ULTRA Scientific  
250 Smith Street  
No. Kingstown, RI  
02852

## EPA METHOD 605

## BENZIDINES

Method 605 is an HPLC method for benzidines, using an electrochemical detector.

To read the complete method, log onto our website at [www.ultrasci.com](http://www.ultrasci.com).

### Recommended Method 605 Benzidines Mixture

#### 2 Analytes

benzidine  
3,3-dichlorobenzidine

@ 1000 µg/mL in methanol

**GCM-111-1** 1 x 1 mL

@ 2000 µg/mL in methanol

**US-105N-1** 1 x 1 mL

## EPA METHOD 606

## PHTHALATES

Method 606 is used to measure phthalates. Samples are extracted, concentrated in a Kuderna-Danish apparatus, and then quantitated with GC/ECD.

To read the complete method, log onto our website at [www.ultrasci.com](http://www.ultrasci.com).

### Recommended Standards

Calibration Standard: PSM-606-1

### Technical Note

Phthalate esters are contaminants in many products found in the laboratory, particularly plastics. Great care must be exercised to prevent contamination. Glassware must be scrupulously cleaned to eliminate backgrounds phthalates not derived from the sample.

### Recommended Method 606 Phthalates Mixtures

#### 6 Analytes

bis(2-ethylhexyl) phthalate  
butyl benzyl phthalate  
di-n-butyl phthalate  
diethyl phthalate  
dimethyl phthalate  
di-n-octyl phthalate

@ 100 µg/mL in methanol

**PSM-606-1** 1 x 1 mL

@ 200 µg/mL in methanol

**PSM-620-1** 1 x 1 mL

@ 1000 µg/mL in isooctane

**PSM-806-1** 1 x 1 mL

@ 2000 µg/mL in methanol

**PSM-625-1** 1 x 1 mL

@ 2000 µg/mL in isooctane

**PSM-630-1** 1 x 1 mL

### Phthalate Esters QC Reference Mix (PHE)

#### 6 Analytes

bis(2-ethylhexyl) phthalate	50 µg/mL
butyl benzyl phthalate	10 µg/mL
dimethyl phthalate	25 µg/mL
di-n-butyl phthalate	25 µg/mL
diethyl phthalate	25 µg/mL
di-n-octyl phthalate	50 µg/mL

in acetone

**EPA-2037N-1** 1 x 1 mL

### Phthalates Kit

#### Kit – contains seven ampules:

1 x 1 mL of each individual component  
@ 100 µg/mL in methanol:

bis(2-ethylhexyl) phthalate  
butyl benzyl phthalate  
di-n-butyl phthalate  
diethyl phthalate  
dimethyl phthalate  
di-n-octyl phthalate  
plus  
Phthalates Mixture (PSM-606-1)

**PSK-606**

**Kit**

## Volume discounts for individual solutions

Order 4–19 ampules of the same item and receive a **20% DISCOUNT**  
Order 20 or more ampules of the same item and receive a **30% DISCOUNT**



## EPA METHOD 607

## NITROSAMINES

Method 607 is used to measure nitrosamines. Samples are extracted, concentrated in a Kuderna-Danish apparatus, then quantitated with GC and nitrogen-phosphorus detector.

To read the complete method, log onto our website at [www.ultrasci.com](http://www.ultrasci.com).

## Nitrosamines Mixture

## 3 Analytes

N-nitrosodimethylamine	2000 µg/mL
N-nitrosodiphenylamine	4000 µg/mL
N-nitrosodi-n-propylamine	2000 µg/mL

## in methanol

**NSM-815-1**                      1 x 1 mL

Recommended Method 607  
Nitrosamines Mixtures

## 3 Analytes

N-nitrosodimethylamine  
N-nitrosodiphenylamine  
N-nitrosodi-n-propylamine

## @ 1000 µg/mL in methanol

**NSM-810-1**                      1 x 1 mL

## @ 2000 µg/mL in methanol

**NSM-807-1**                      1 x 1 mL

## Technical Note

N-Nitrosodiphenylamine may undergo transnitrosation reactions in the presence of reactive amines during the solution concentration step. N-Nitrosodiphenylamine may also decompose in the gas chromatographic inlet to diphenylamine.

## Volume discounts for individual solutions

Order 4–19 ampules of the same item and receive a **20% DISCOUNT**  
Order 20 or more ampules of the same item and receive a **30% DISCOUNT**



## ORDERING IS EASY

## Online

[www.ultrasci.com](http://www.ultrasci.com)  
[ultra@ultrasci.com](mailto:ultra@ultrasci.com)

## Phone

800-338-1754  
Monday – Friday  
8:30 a.m. - 5:00 p.m. ET

## Fax

401-295-2330

## Mail

ULTRA Scientific  
250 Smith Street  
No. Kingstown, RI  
02852



## EPA METHOD 608, 608.1, 608.2

**Organochlorine Pesticides and PCBs**

Method 608 is used to measure organochlorine pesticides and PCBs, using extraction followed by GC/ECD. Methods 608.1 and 608.2 include additional analytes.

To read the complete method, log onto our website at [www.ultrasci.com](http://www.ultrasci.com).

**Recommended Standards**

Calibration Standards:	PPM-608B-1 PPM-608F-1
Surrogate Standards:	ISM-320-1 ISM-301-1

**Technical Note**

Chlordane, toxaphene, and the Aroclors are examples of technical mixtures composed of many compounds. Due to variations in the manufacturing process, the exact composition of these mixtures varies from lot to lot.

**Recommended Method 608 Organochlorine Pesticides Mixture**

16 Analytes

aldrin  
alpha-BHC  
beta-BHC  
delta-BHC  
gamma-BHC  
4,4'-DDD  
4,4'-DDE  
4,4'-DDT  
dieldrin  
endosulfan I  
endosulfan II  
endosulfan sulfate  
endrin  
endrin aldehyde  
heptachlor  
heptachlor epoxide (B)

@ 20 µg/mL in methanol

**PPM-608B-1** 1 x 1 mL

@ 2000 µg/mL in hexane/toluene (1:1)

**US-102BN-1** 1 x 1 mL

@ 200 µg/mL in hexane/toluene (1:1)

**PPM-665-1** 1 x 1 mL

@ 400 µg/mL in hexane

**PPM-680-1** 1 x 1 mL

@ 2000 µg/mL in methanol

**PPM-695-1** 1 x 1 mL

**Recommended Method 608 Pesticide Surrogate Standard Spiking Solutions**

2 Analytes

2,4,5,6-tetrachloro-m-xylene  
decachlorobiphenyl

@ 200 µg/mL in acetone

**ISM-320-1** 1 x 1 mL

2 Analytes

dibutyl chlorendate  
2,4,5,6-tetrachloro-m-xylene

@ 200 µg/mL in acetone

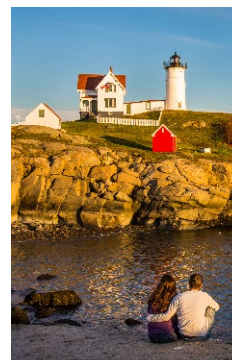
**ISM-301-1** 1 x 1 mL

**WWW.ULTRASCI.COM****Download and Print from Our Online Library**

The ULTRA Scientific website allows you to easily obtain up-to-date documents that are related not only to our business, but to the industry in general.

**Choose from:**

- ✓ ULTRA Scientific catalog
- ✓ ULTRA Scientific brochures
- ✓ SDS's (GHS compliant)
- ✓ EPA Methods
- ✓ And more!



## EPA METHOD 608, 608.1, 608.2

(continued)

## Recommended Method 608 Chlordane, Toxaphene, and PCB Standards

All @ in	1 x 1 mL Ampules		
chlordan	100 µg/mL	methanol	PP-150-1
toxaphene	100 µg/mL	methanol	PP-270-1
Aroclor 1016	100 µg/mL	methanol	PP-280-1
Aroclor 1016	200 µg/mL	hexane	PP-285-1
Aroclor 1016	1000 µg/mL	hexane	PP-284-1
Aroclor 1221	100 µg/mL	methanol	PP-290-1
Aroclor 1221	200 µg/mL	hexane	PP-295-1
Aroclor 1221	1000 µg/mL	hexane	PP-294-1
Aroclor 1232	100 µg/mL	methanol	PP-300-1
Aroclor 1232	200 µg/mL	hexane	PP-305-1
Aroclor 1232	1000 µg/mL	hexane	PP-304-1
Aroclor 1242	100 µg/mL	methanol	PP-310-1
Aroclor 1242	200 µg/mL	hexane	PP-315-1
Aroclor 1242	1000 µg/mL	hexane	PP-314-1
Aroclor 1248	100 µg/mL	methanol	PP-340-1
Aroclor 1248	200 µg/mL	hexane	PP-345-1
Aroclor 1248	1000 µg/mL	hexane	PP-344-1
Aroclor 1254	100 µg/mL	methanol	PP-350-1
Aroclor 1254	200 µg/mL	hexane	PP-355-1
Aroclor 1260	100 µg/mL	methanol	PP-360-1
Aroclor 1260	200 µg/mL	hexane	PP-364-1
Aroclor 1260	1000 µg/mL	hexane	PP-363-1
Aroclor 1262	200 µg/mL	hexane	PP-374-1
Aroclor 1262	1000 µg/mL	hexane	PP-373-1
Aroclor 1268	200 µg/mL	hexane	PP-384-1
Aroclor 1268	1000 µg/mL	hexane	PP-383-1
Chlordane	1000 µg/mL	hexane	PST-110H1000
Toxaphene	1000 µg/mL	hexane	PST-970H1000

Organochlorine Pesticides Mixture  
for EPA Method 608.2

## 5 Analytes

chlorothalonil	1 µg/mL
DCPA	3 µg/mL
dichloran	2 µg/mL
methoxychlor	40 µg/mL
permethrin (mixed isomers)	400 µg/mL

in hexane

PPM-608F-1 1 x 1 mL

## Waste Water Pesticides Mixture

## 7 Analytes

aldrin
4,4'-DDD
4,4'-DDE
4,4'-DDT
dieldrin
heptachlor
heptachlor epoxide - isomer B

@ 100 µg/mL in acetone

PPM-608G-1 1 x 1 mL

Chlorinated Hydrocarbon  
Pesticides Mix 1

## 6 Analytes

aldrin	100 µg/mL
4,4'-DDD	500 µg/mL
4,4'-DDE	100 µg/mL
4,4'-DDT	500 µg/mL
dieldrin	100 µg/mL
heptachlor	100 µg/mL

in acetone

EPA-2101N-1 1 x 1 mL

**Organochlorine Pesticides Kit****Kit – contains twenty-six ampules:**

1 x 1 mL of each individual analyte

@ 100 µg/mL in methanol:

aldrin  
 alpha-BHC  
 beta-BHC  
 delta-BHC  
 gamma-BHC  
 chlordane  
 4,4'-DDD  
 4,4'-DDE  
 4,4'-DDT  
 dieldrin  
 endosulfan I  
 endosulfan II  
 endosulfan sulfate  
 endrin  
 endrin aldehyde  
 heptachlor  
 heptachlor epoxide (B)  
 toxaphene  
 Aroclor 1016  
 Aroclor 1221  
 Aroclor 1232  
 Aroclor 1242  
 Aroclor 1248  
 Aroclor 1254  
 Aroclor 1260  
 plus  
 Pesticides Mixture (PPM-608B-1)

**PPK-608B****Kit****Pesticide Degradation Check Solution**

2 Analytes

4,4'-DDT  
 endrin

@ 10 µg/mL in methyl tert-butyl ether (MTBE)

**ISM-454-1****1 x 1 mL****Pesticides Mixture**

13 Analytes

aldrin  
 alpha-BHC  
 beta-BHC  
 delta-BHC  
 2,4'-DDD  
 4,4'-DDD  
 2,4'-DDE  
 4,4'-DDE  
 2,4'-DDT  
 4,4'-DDT  
 dieldrin  
 endrin  
 gamma-BHC

@ 100 µg/mL in isooctane/toluene (88:12 V/V)

**PPM-480-1****1 x 1 mL****Organochlorine Pesticides Mixture**

17 Analytes

aldrin 20 µg/mL  
 alpha-BHC 20 µg/mL  
 beta-BHC 20 µg/mL  
 delta-BHC 20 µg/mL  
 gamma-BHC 20 µg/mL  
 4,4'-DDD 100 µg/mL  
 4,4'-DDE 20 µg/mL  
 4,4'-DDT 100 µg/mL  
 dieldrin 20 µg/mL  
 endosulfan I 20 µg/mL  
 endosulfan II 100 µg/mL  
 endosulfan sulfate 100 µg/mL  
 endrin 100 µg/mL  
 endrin aldehyde 20 µg/mL  
 heptachlor 20 µg/mL  
 heptachlor epoxide (B) 20 µg/mL  
 methoxychlor 20 µg/mL

in methanol

**PPM-608C-1****1 x 1 mL****Pesticides Mixture**

12 Analytes

aldrin  
 alpha-BHC  
 beta-BHC  
 delta-BHC  
 4,4'-DDD  
 4,4'-DDE  
 4,4'-DDT  
 dieldrin  
 endrin  
 gamma-BHC  
 heptachlor  
 heptachlor epoxide - isomer B

@ 2000 µg/mL in hexane/toluene (1:1)

**PPM-485-1****1 x 1 mL****Organochlorine Pesticides Mixture**

7 Analytes

1,2-dibromo-3-chloropropane  
 chlorobenzilate  
 chloroneb  
 chloropropylate  
 etridiazole  
 pentachloronitrobenzene  
 propachlor

@ 100 µg/mL in isooctane

**PPM-609-1****1 x 1 mL****Organochlorine Pesticides Mixture**

5 Analytes

chlorothalonil  
 dacthal  
 dichloran  
 methoxychlor  
 permethrins (mixed isomers, total)

@ 1000 µg/mL in isooctane

**PPM-610-1****1 x 1 mL**

## EPA METHOD 608, 608.1, 608.2

(continued)

**Organochlorine Pesticides Mixture**

16 Analytes

aldrin	20 µg/mL
alpha-BHC	20 µg/mL
gamma-BHC	20 µg/mL
beta-BHC	20 µg/mL
4,4'-DDD	100 µg/mL
4,4'-DDE	20 µg/mL
4,4'-DDT	100 µg/mL
delta-BHC	20 µg/mL
dieldrin	20 µg/mL
endosulfan I	20 µg/mL
endosulfan II	100 µg/mL
endosulfan sulfate	100 µg/mL
endrin	100 µg/mL
endrin aldehyde	20 µg/mL
heptachlor	20 µg/mL
heptachlor epoxide - isomer B	20 µg/mL

*in methanol***PPM-655-1**      **1 x 1 mL****Organochlorine Pesticides Mixture**

17 Analytes

aldrin	20 µg/mL
alpha-BHC	20 µg/mL
beta-BHC	20 µg/mL
gamma-BHC	20 µg/mL
delta-BHC	20 µg/mL
4,4'-DDD	100 µg/mL
4,4'-DDE	20 µg/mL
4,4'-DDT	100 µg/mL
dieldrin	20 µg/mL
endosulfan I	20 µg/mL
endosulfan II	100 µg/mL
endosulfan sulfate	100 µg/mL
endrin	20 µg/mL
endrin aldehyde	100 µg/mL
heptachlor	20 µg/mL
heptachlor epoxide - isomer B	20 µg/mL
methoxychlor	20 µg/mL

*in methanol***PPM-660-1**      **1 x 1 mL****Organochlorine Pesticides Mixture**

17 Analytes

aldrin	
alpha-BHC	
beta-BHC	
gamma-BHC	
delta-BHC	
4,4'-DDD	
4,4'-DDE	
4,4'-DDT	
dieldrin	
endosulfan I	
endosulfan II	
endosulfan sulfate	
endrin	
endrin aldehyde	
heptachlor	
heptachlor epoxide - isomer B	
methoxychlor	

@ 20 µg/mL in methanol

**PPM-685-1**      **1 x 1 mL****Chlordane and Toxaphene Mixture**

2 Analytes

chlordane	2000 µg/mL
toxaphene	4000 µg/mL

*in methanol***TCLP-533-1**      **1 x 1 mL****Chlordane & Toxaphene Solution**

2 Analytes

chlordane	20 µg/mL
toxaphene	100 µg/mL

*in methanol***TCLP-534-1**      **1 x 1 mL****Chlordane & Toxaphene Solution**

2 Analytes

chlordane	20 µg/mL
toxaphene	200 µg/mL

*in methanol***TCLP-535-1**      **1 x 1 mL****Pesticide Degradation Check Solution**

2 Analytes

4,4'-DDT	200 µg/mL
endrin	100 µg/mL

*methyl tert-butyl ether (MTBE)***ISM-452-1**      **1 x 1 mL****Aroclors Mixture**

4 Analytes

Aroclor 1016
Aroclor 1232
Aroclor 1248
Aroclor 1260

@ 200 µg/mL in methanol

**XY-0130-1**      **1 x 1 mL****Aroclors Mixture**

3 Analytes

Aroclor 1221
Aroclor 1242
Aroclor 1254

@ 200 µg/mL in methanol

**XY-0131-1**      **1 x 1 mL**



## EPA METHOD 609

## NITROAROMATICS AND ISOPHORONE

Method 609 is used to measure nitroaromatics and isophorone. Samples are extracted, concentrated in a Kuderna-Danish apparatus, then quantitated with GC/FID and GC/ECD.

To read the complete method, log onto our website at [www.ultrasci.com](http://www.ultrasci.com).

## Nitroaromatics Mixture

## 2 Analytes

2,4-dinitrotoluene  
2,6-dinitrotoluene

@ 200 µg/mL in methanol

**NAIM-610-1** 1 x 1 mL

@ 1000 µg/mL in hexane

**NAIM-611-1** 1 x 1 mL

## Nitroaromatics and Isophorone Mixture

## 4 Analytes

2,4-dinitrotoluene  
2,6-dinitrotoluene  
isophorone  
nitrobenzene

@ 100 µg/mL in methanol

**NAIM-609-1** 1 x 1 mL

@ 2000 µg/mL in hexane

**NAIM-625-1** 1 x 1 mL

## Nitrobenzene and Isophorone Mixture

## 2 Analytes

isophorone  
nitrobenzene

@ 1000 µg/mL in hexane

**NAIM-620-1** 1 x 1 mL

@ 200 µg/mL in methanol

**NAIM-615-1** 1 x 1 mL

## Nitroaromatics and Isophorone Mixture

## 4 Analytes

2,4-dinitrotoluene 20 µg/mL  
2,6-dinitrotoluene 20 µg/mL  
isophorone 100 µg/mL  
nitrobenzene 100 µg/mL

in acetone

**NAIM-630-1** 1 x 1 mL

## Volume discounts for individual solutions

Order 4–19 ampules of the same item and receive a **20% DISCOUNT**  
Order 20 or more ampules of the same item and receive a **30% DISCOUNT**



## ORDERING IS EASY

## Online

[www.ultrasci.com](http://www.ultrasci.com)  
[ultra@ultrasci.com](mailto:ultra@ultrasci.com)

## Phone

800-338-1754  
Monday – Friday  
8:30 a.m. - 5:00 p.m. ET

## Fax

401-295-2330

## Mail

ULTRA Scientific  
250 Smith Street  
No. Kingstown, RI  
02852



## EPA METHOD 610

POLYNUCLEAR  
AROMATIC  
HYDROCARBONS

Method 610 is used to measure polynuclear aromatic hydrocarbons, using extraction followed by either GC/FID, or HPLC using a UV or a fluorescence detector.

To read the complete method, log onto our website at [www.ultrasci.com](http://www.ultrasci.com).

## Recommended Standards

Calibration Standards: US-106N-1  
PM-611-1

Recommended Method 610  
PAH Mixtures

## 16 Analytes

acenaphthene  
acenaphthylene  
anthracene  
benz[a]anthracene  
benzo[b]fluoranthene  
benzo[k]fluoranthene  
benzo[ghi]perylene  
benzo[a]pyrene  
chrysene  
dibenz[a,h]anthracene  
fluoranthene  
fluorene  
indeno[1,2,3-cd]pyrene  
naphthalene  
phenanthrene  
pyrene

@ 20 µg/mL in methylene chloride

**PM-610-1** 1 x 1 mL

@ 100 µg/mL in methylene chloride

**PM-611-1** 1 x 1 mL

@ 2000 µg/mL in  
methylene chloride/benzene (1:1)

**US-106N-1** 1 x 1 mL

## PAH Kit

## Kit – contains seventeen ampules:

1 x 1 mL of each individual component  
@ 100 µg/mL in methylene chloride:

acenaphthene \*  
acenaphthylene \*  
anthracene  
benz[a]anthracene  
benzo[b]fluoranthene  
benzo[k]fluoranthene  
benzo[ghi]perylene  
benzo[a]pyrene  
chrysene  
dibenz[a,h]anthracene  
fluoranthene  
fluorene \*  
indeno[1,2,3-cd]pyrene  
naphthalene \*  
phenanthrene  
pyrene  
plus  
PAH Mixture (PM-610-1)  
(\* methanol solvent)

**PK-610**

**Kit**

## PAH Solution

## 16 Analytes

acenaphthene  
acenaphthylene  
anthracene  
benz[a]anthracene  
benzo[a]pyrene  
benzo[b]fluoranthene  
benzo[ghi]perylene  
benzo[k]fluoranthene  
chrysene  
dibenz[a,h]anthracene  
fluoranthene  
fluorene  
indeno[1,2,3-cd]pyrene  
naphthalene  
phenanthrene  
pyrene

@ 100 µg/mL in acetonitrile

**PAH-600-1** 1 x 1 mL

@ 100 µg/mL in methanol/methylene chloride (1:1)

**PAH-605-1** 1 x 1 mL

@ 1000 µg/mL in methylene chloride  
(dichloromethane)

**PAH-615-1** 1 x 1 mL

@ 2000 µg/mL in toluene

**PAH-630-1** 1 x 1 mL

@ 2000 µg/mL in acetone

**PAH-635-1** 1 x 1 mL

@ 3200 µg/mL in methylene chloride/benzene (1:1)

**PAH-640-1** 1 x 1 mL

@ 2000 µg/mL in benzene/toluene

**PAH-715-1** 1 x 1 mL

@ 2000 µg/mL in  
methylene chloride/benzene (1:1)

**US-106N-1** 1 x 1 mL

Volume discounts for  
individual solutions

Order 4–19 ampules of the same item  
and receive a **20% DISCOUNT**  
Order 20 or more ampules of the same  
item and receive a **30% DISCOUNT**



## EPA METHOD 610

(continued)

## PAH Solution

## 16 Analytes

acenaphthene	100 µg/mL
acenaphthylene	100 µg/mL
anthracene	100 µg/mL
benz[a]anthracene	10 µg/mL
benzo[a]pyrene	10 µg/mL
benzo[b]fluoranthene	10 µg/mL
benzo[ghi]perylene	10 µg/mL
benzo[k]fluoranthene	5 µg/mL
chrysene	10 µg/mL
dibenz[a,h]anthracene	10 µg/mL
fluoranthene	10 µg/mL
fluorene	100 µg/mL
indeno[1,2,3-cd]pyrene	10 µg/mL
naphthalene	100 µg/mL
phenanthrene	100 µg/mL
pyrene	10 µg/mL

*in methylene chloride/Cyclohexane (1:1)***PAH-645-1**      **1 x 1 mL**

## PAH Solution

## 16 Analytes

acenaphthene	1000 µg/mL
acenaphthylene	2000 µg/mL
anthracene	100 µg/mL
benz[a]anthracene	100 µg/mL
benzo[a]pyrene	200 µg/mL
benzo[b]fluoranthene	200 µg/mL
benzo[ghi]perylene	100 µg/mL
benzo[k]fluoranthene	100 µg/mL
chrysene	100 µg/mL
dibenz[a,h]anthracene	100 µg/mL
fluoranthene	200 µg/mL
fluorene	200 µg/mL
indeno[1,2,3-cd]pyrene	100 µg/mL
naphthalene	1000 µg/mL
phenanthrene	100 µg/mL
pyrene	100 µg/mL

*in methanol/methylene chloride (1:1)***PAH-650-1**      **1 x 1 mL**

## PAH Solution

## 16 Analytes

acenaphthene	1000 µg/mL
acenaphthylene	1000 µg/mL
anthracene	1000 µg/mL
benz[a]anthracene	100 µg/mL
benzo[a]pyrene	100 µg/mL
benzo[b]fluoranthene	100 µg/mL
benzo[ghi]perylene	100 µg/mL
benzo[k]fluoranthene	50 µg/mL
chrysene	100 µg/mL
dibenz[a,h]anthracene	100 µg/mL
fluoranthene	100 µg/mL
fluorene	1000 µg/mL
indeno[1,2,3-cd]pyrene	100 µg/mL
naphthalene	1000 µg/mL
phenanthrene	1000 µg/mL
pyrene	100 µg/mL

*in methylene chloride***PAH-655-1**      **1 x 1 mL**

## PAH Solution

## 16 Analytes

acenaphthene	1000 µg/mL
acenaphthylene	2000 µg/mL
anthracene	100 µg/mL
benz[a]anthracene	100 µg/mL
benzo[a]pyrene	100 µg/mL
benzo[b]fluoranthene	200 µg/mL
benzo[ghi]perylene	200 µg/mL
benzo[k]fluoranthene	100 µg/mL
chrysene	100 µg/mL
dibenz[a,h]anthracene	200 µg/mL
fluoranthene	200 µg/mL
fluorene	200 µg/mL
indeno[1,2,3-cd]pyrene	100 µg/mL
naphthalene	1000 µg/mL
phenanthrene	100 µg/mL
pyrene	100 µg/mL

*in methanol/methylene chloride (1:1)***PAH-660-1**      **1 x 1 mL**

## PAH Solution

## 16 Analytes

acenaphthene	1000 µg/mL
acenaphthylene	2000 µg/mL
anthracene	100 µg/mL
benz[a]anthracene	100 µg/mL
benzo[a]pyrene	100 µg/mL
benzo[b]fluoranthene	100 µg/mL
benzo[ghi]perylene	200 µg/mL
benzo[k]fluoranthene	100 µg/mL
chrysene	100 µg/mL
dibenz[a,h]anthracene	200 µg/mL
fluoranthene	200 µg/mL
fluorene	200 µg/mL
indeno[1,2,3-cd]pyrene	100 µg/mL
naphthalene	1000 µg/mL
phenanthrene	100 µg/mL
pyrene	100 µg/mL

*in toluene***PAH-665-1**      **1 x 1 mL**

## EPA METHOD 610

(continued)

## Matrix Spiking Solution

## 6 Analytes

benzo[a]pyrene	500 µg/mL
chrysene	500 µg/mL
1-methylnaphthalene	5000 µg/mL
2-methylnaphthalene	5000 µg/mL
phenanthrene	50 µg/mL
pyrene	50 µg/mL

*in acetonitrile***PM-025-1**                      **1 x 1 mL**

## PAH Mixture

## 16 Analytes

acenaphthene	1000 µg/mL
acenaphthylene	1000 µg/mL
anthracene	1000 µg/mL
benz[a]anthracene	500 µg/mL
benzo[a]pyrene	500 µg/mL
benzo[b]fluoranthene	500 µg/mL
benzo[ghi]perylene	500 µg/mL
benzo[k]fluoranthene	500 µg/mL
chrysene	500 µg/mL
dibenz[a,h]anthracene	500 µg/mL
fluoranthene	500 µg/mL
fluorene	1000 µg/mL
indeno[1,2,3-cd]pyrene	500 µg/mL
naphthalene	1000 µg/mL
phenanthrene	500 µg/mL
pyrene	500 µg/mL

*in methylene chloride***PM-030-1**                      **1 x 1 mL**

## PAH Mixture

## 18 Analytes

acenaphthene	
acenaphthylene	
anthracene	
benz[a]anthracene	
benzo[a]pyrene	
benzo[b]fluoranthene	
benzo[e]pyrene	
benzo[ghi]perylene	
benzo[j]fluoranthene	
benzo[k]fluoranthene	
chrysene	
dibenz[a,h]anthracene	
fluoranthene	
fluorene	
indeno[1,2,3-cd]pyrene	
naphthalene	
phenanthrene	
pyrene	

@ 1000 µg/mL in methylene chloride

**PM-035-1**                      **1 x 1 mL**

## PAH Mixture

## 16 Analytes

acenaphthene	1000 µg/mL
acenaphthylene	500 µg/mL
anthracene	20 µg/mL
benz[a]anthracene	50 µg/mL
benzo[a]pyrene	50 µg/mL
benzo[b]fluoranthene	20 µg/mL
benzo[ghi]perylene	80 µg/mL
benzo[k]fluoranthene	20 µg/mL
chrysene	50 µg/mL
dibenz[a,h]anthracene	20 µg/mL
fluoranthene	50 µg/mL
fluorene	100 µg/mL
indeno[1,2,3-cd]pyrene	50 µg/mL
naphthalene	500 µg/mL
phenanthrene	40 µg/mL
pyrene	100 µg/mL

*in acetonitrile***PM-040-1**                      **1 x 1 mL**

## PAH Mixture

## 18 Analytes

acenaphthene	1000 µg/mL
acenaphthylene	2000 µg/mL
anthracene	100 µg/mL
benz[a]anthracene	100 µg/mL
benzo[a]pyrene	100 µg/mL
benzo[b]fluoranthene	200 µg/mL
benzo[ghi]perylene	200 µg/mL
benzo[k]fluoranthene	100 µg/mL
chrysene	100 µg/mL
dibenz[a,h]anthracene	200 µg/mL
fluoranthene	200 µg/mL
fluorene	200 µg/mL
indeno[1,2,3-cd]pyrene	100 µg/mL
1-methylnaphthalene	200 µg/mL
2-methylnaphthalene	200 µg/mL
naphthalene	1000 µg/mL
phenanthrene	100 µg/mL
pyrene	100 µg/mL

*in methanol/methylene chloride (1:1)***PM-045-1**                      **1 x 1 mL**

## PAH Mixture

## 18 Analytes

acenaphthene	1000 µg/mL
acenaphthylene	2000 µg/mL
anthracene	100 µg/mL
benz[a]anthracene	100 µg/mL
benzo[a]pyrene	100 µg/mL
benzo[b]fluoranthene	200 µg/mL
benzo[ghi]perylene	200 µg/mL
benzo[k]fluoranthene	200 µg/mL
chrysene	100 µg/mL
dibenz[a,h]anthracene	200 µg/mL
fluoranthene	200 µg/mL
fluorene	200 µg/mL
indeno[1,2,3-cd]pyrene	100 µg/mL
1-methylnaphthalene	1000 µg/mL
2-methylnaphthalene	1000 µg/mL
naphthalene	1000 µg/mL
phenanthrene	100 µg/mL
pyrene	100 µg/mL

*in acetonitrile***PM-050-1**                      **1 x 1 mL**

**PAH Mixture***17 Analytes*

acenaphthene  
 acenaphthylene  
 anthracene  
 benz[a]anthracene  
 benzo[a]pyrene  
 benzo[b]fluoranthene  
 benzo[ghi]perylene  
 benzo[k]fluoranthene  
 chrysene  
 coronene  
 dibenz[a,h]anthracene  
 fluoranthene  
 fluorene  
 indeno[1,2,3-cd]pyrene  
 naphthalene  
 phenanthrene  
 pyrene

*@ 1000 µg/mL in acetonitrile***PM-055-1** **1 x 1 mL****PAH Mixture***18 Analytes*

acenaphthene  
 acenaphthylene  
 anthracene  
 benz[a]anthracene  
 benzo[a]pyrene  
 benzo[b]fluoranthene  
 benzo[e]pyrene  
 benzo[ghi]perylene  
 benzo[k]fluoranthene  
 chrysene  
 dibenz[a,h]anthracene  
 fluoranthene  
 fluorene  
 indeno[1,2,3-cd]pyrene  
 naphthalene  
 phenanthrene  
 pyrene  
 p-terphenyl-d14

*@ 1000 µg/mL in methanol***PM-060-1** **1 x 1 mL****PAH Mixture***16 Analytes*

acenaphthene 100 µg/mL  
 acenaphthylene 100 µg/mL  
 anthracene 100 µg/mL  
 benz[a]anthracene 10 µg/mL  
 benzo[b]fluoranthene 10 µg/mL  
 benzo[k]fluoranthene 5 µg/mL  
 benzo[ghi]perylene 10 µg/mL  
 benzo[a]pyrene 10 µg/mL  
 chrysene 10 µg/mL  
 dibenz[a,h]anthracene 10 µg/mL  
 fluoranthene 10 µg/mL  
 fluorene 100 µg/mL  
 indeno[1,2,3-cd]pyrene 10 µg/mL  
 naphthalene 100 µg/mL  
 phenanthrene 100 µg/mL  
 pyrene 10 µg/mL

*in acetonitrile***PM-613A-1** **1 x 1 mL****PAH Mixture #1***8 Analytes*

acenaphthene 1000 µg/mL  
 anthracene 1000 µg/mL  
 benzo[k]fluoranthene 50 µg/mL  
 chrysene 100 µg/mL  
 fluorene 1000 µg/mL  
 indeno[1,2,3-cd]pyrene 100 µg/mL  
 naphthalene 1000 µg/mL  
 pyrene 100 µg/mL

*in acetonitrile***EPA-2138N-1** **1 x 1 mL****PAH Mixture #2***8 Analytes*

acenaphthylene 1000 µg/mL  
 benz[a]anthracene 100 µg/mL  
 benzo[b]fluoranthene 100 µg/mL  
 benzo[ghi]perylene 100 µg/mL  
 benzo[a]pyrene 100 µg/mL  
 dibenz[a,h]anthracene 100 µg/mL  
 fluoranthene 100 µg/mL  
 phenanthrene 1000 µg/mL

*in acetonitrile***EPA-2139N-1** **1 x 1 mL****PAH Mixture***16 Analytes*

acenaphthene 100 µg/mL  
 acenaphthylene 200 µg/mL  
 anthracene 100 µg/mL  
 benz[a]anthracene 100 µg/mL  
 benzo[b]fluoranthene 200 µg/mL  
 benzo[k]fluoranthene 100 µg/mL  
 benzo[ghi]perylene 200 µg/mL  
 benzo[a]pyrene 100 µg/mL  
 chrysene 100 µg/mL  
 dibenz[a,h]anthracene 200 µg/mL  
 fluoranthene 200 µg/mL  
 fluorene 200 µg/mL  
 indeno[1,2,3-cd]pyrene 100 µg/mL  
 naphthalene 1000 µg/mL  
 phenanthrene 100 µg/mL  
 pyrene 100 µg/mL

*in methylene chloride***PM-612-1** **1 x 1 mL****PAH Mix 1 (PNA-1)***7 Analytes*

acenaphthene 100 µg/mL  
 anthracene 100 µg/mL  
 benzo[k]fluoranthene 5 µg/mL  
 chrysene 10 µg/mL  
 indeno[1,2,3-cd]pyrene 10 µg/mL  
 naphthalene 100 µg/mL  
 pyrene 10 µg/mL

*in acetonitrile***EPA-2038N-1** **1 x 1 mL****PAH Mix 2 (PNA-2)***8 Analytes*

acenaphthylene 100 µg/mL  
 benz[a]anthracene 10 µg/mL  
 benzo[b]fluoranthene 10 µg/mL  
 benzo[ghi]perylene 10 µg/mL  
 benzo[a]pyrene 10 µg/mL  
 dibenz[a,h]anthracene 10 µg/mL  
 fluoranthene 10 µg/mL  
 phenanthrene 100 µg/mL

*in acetonitrile***EPA-2039N-1** **1 x 1 mL**

## EPA METHOD 611

**HALOETHERS**

Method 611 is used to measure haloethers. Samples are extracted, concentrated in a Kuderna-Danish apparatus, then quantitated using a GC with an electrolytic conductivity detector.

To read the complete method, log onto our website at [www.ultrasci.com](http://www.ultrasci.com).

**Haloethers Mixture (HAL)****5 Analytes**

4-bromophenyl phenyl ether  
4-chlorophenyl phenyl ether  
bis(2-chloroethoxy)methane  
bis(2-chloroethyl) ether  
bis(2-chloroisopropyl) ether

@ 200 µg/mL in methanol

**EPA-2017-1** **1 x 1 mL**

@ 2000 µg/mL in acetone

**EPA-2018-1** **1 x 1 mL**

## EPA METHOD 612

**Chlorinated Hydrocarbons**

Method 612 is used to measure chlorinated hydrocarbons, using extraction followed by GC/ECD.

To read the complete method, log onto our website at [www.ultrasci.com](http://www.ultrasci.com).

**Recommended Standards**

Calibration Standard: CHM-622-1

**Recommended Method 612****Chlorinated Hydrocarbons Mixture****9 Analytes**

2-chloronaphthalene 400 µg/mL  
1,2-dichlorobenzene 200 µg/mL  
1,3-dichlorobenzene 200 µg/mL  
1,4-dichlorobenzene 400 µg/mL  
hexachlorobenzene 1 µg/mL  
hexachlorobutadiene 1 µg/mL  
hexachlorocyclopentadiene 1 µg/mL  
hexachloroethane 1 µg/mL  
1,2,4-trichlorobenzene 40 µg/mL

in isooctane

**CHM-622-1** **1 x 1 mL**

**Chlorinated Hydrocarbons Mixture****9 Analytes**

2-chloronaphthalene  
1,2-dichlorobenzene  
1,3-dichlorobenzene  
1,4-dichlorobenzene  
hexachlorobenzene  
hexachlorobutadiene  
hexachlorocyclopentadiene  
hexachloroethane  
1,2,4-trichlorobenzene

@ 100 µg/mL in

methanol / methylene chloride (1:1)

**CHM-612-1** **1 x 1 mL**

@ 2000 µg/mL in isooctane

**CHM-625-1** **1 x 1 mL**

**Chlorinated Hydrocarbons Kit****Kit – contains ten ampules:**

1 x 1 mL of each individual component @ 100 µg/mL in methanol:

2-chloronaphthalene \*hexachlorobutadiene  
1,2-dichlorobenzene hexachlorocyclopentadiene  
1,3-dichlorobenzene hexachloroethane  
1,4-dichlorobenzene 1,2,4-trichlorobenzene  
hexachlorobenzene \*  
plus  
Chlorinated Hydrocarbons Mixture (CHM-612-1)  
(\* methylene chloride solvent)

**CHK-612**

**Kit**

## EPA METHOD 613

**2,3,7,8-TCDD**

Method 613 is used to determine 2,3,7,8-tetra-chlorodibenzo-p-dioxin, using extraction followed by capillary column GC/MS.

To read the complete method, log onto our website at [www.ultrasci.com](http://www.ultrasci.com).

**Recommended Method 613  
TCDD Solution**

2,3,7,8-tetrachlorodibenzo-p-dioxin

@ 10 µg/mL in toluene

**RPE-029S-1** 1 x 1 mL



**Find additional EPA Method 600  
Series Standards online:**

[www.ultrasci.com/EPA600](http://www.ultrasci.com/EPA600)

## EPA METHOD 614, 614.1

**ORGANOPHOSPHORUS  
PESTICIDES**

Methods 614 and 614.1 are used to measure organophosphorus pesticides. Samples are extracted, then quantitated using GC/NPD.

To read the complete method, log onto our website at [www.ultrasci.com](http://www.ultrasci.com).

**Recommended Standards**

Calibration Standards: SPM-614-1  
SPM-624-1

**Recommended Method 614  
Organophosphorus  
Pesticides Mixture**

8 Analytes

azinphos methyl

demeton

diazinon

disulfoton

ethion

malathion

parathion ethyl

parathion methyl

@ 200 µg/mL in acetone

**SPM-614-1** 1 x 1 mL

@ 1000 µg/mL in hexane/acetone (1:1)

**SPM-630-1** 1 x 1 mL

**Recommended Method 614.1  
Organophosphorus  
Pesticides Mixture**

4 Analytes

dioxathion 10 µg/mL

EPN 200 µg/mL

ethion 100 µg/mL

terbufos 4 µg/mL

in hexane

**SPM-624-1** 1 x 1 mL

**Organophosphorus Pesticide  
Mixture**

4 Analytes

Dioxathion

EPN

ethion

terbufos

@ 1000 µg/mL in hexane/acetone (1:1)

**SPM-625-1** 1 x 1 mL

**Individual Internal & Surrogate Standards for Methods 614, 614.1**

All @ 1000 µg/mL

All in 1 x 1 mL Ampules

terbufos	methanol	PST-1700M1000
disulfoton	methanol	PST-470M1000
dioxathion	methanol	PST-455M1000
guthion	acetone	PST-560K1000
EPN	methanol	PST-520M1000
ethion	methanol	PST-530M1000
parathion (ethyl)	methanol	PST-761M1000
demeton (total, mixed isomers)	methanol	PST-920M1000

## EPA METHOD 615

CHLORINATED  
HERBICIDES

Method 615 is used to measure chlorinated herbicides. Samples are extracted, derivatized, and quantitated on GC/ECD.

To read the complete method, log onto our website at [www.ultrasci.com](http://www.ultrasci.com).

## Recommended Standards

Calibration Standard: HBM-8150A-1

## Chlorinated Herbicides Mixture

8 Analytes

2,4-D  
2,4-DB  
dalapon  
dicamba  
dichlorprop  
dinoseb  
silvex  
2,4,5-T

@ 200 µg/mL in methyl tert-butyl ether (MTBE)

**HBM-541-1** 1 x 1 mL

@ 20 µg/mL in hexane

**HBM-542-1** 1 x 1 mL

@ 200 µg/mL in hexane

**HBM-543-1** 1 x 1 mL

@ 20 µg/mL in methyl tert-butyl ether (MTBE)

**HBM-540-1** 1 x 1 mL

Recommended Method 615  
Chlorinated Herbicides Mixtures

10 Analytes

2,4-D	100 µg/mL
2,4-DB	100 µg/mL
dalapon	250 µg/mL
dicamba	10 µg/mL
dichlorprop	100 µg/mL
dinoseb	50 µg/mL
MCPA	10,000 µg/mL
MCPP	10,000 µg/mL
silvex (2,4,5-TP)	10 µg/mL
2,4,5-T	10 µg/mL

Herbicide Acids Mixture

in methanol

**HBM-8150A-1** 1 x 1 mL

Methylated Herbicide Mixture

in methanol

**HBM-8150M-1** 1 x 1 mL

Internal and Surrogate Standard  
Solutions for Method 615

4,4-dibromooctafluorobiphenyl

@ 250 µg/mL in acetone

**PPS-171-1** 1 x 1 mL

2,4-dichlorophenylacetic acid (DCAA)

@ 100 µg/mL in acetone

**PPS-165-1** 1 x 1 mL

2,4-dichlorophenylacetic acid (DCAA)

@ 1000 µg/mL in acetone

**PPS-167-1** 1 x 1 mL

DCAA methyl ester

@ 100 µg/mL in acetone

**PPS-166-1** 1 x 1 mL

DCAA methyl ester

@ 200 µg/mL in hexane

**PST-4065H200A01** 1 x 1 mL

## Chlorinated Herbicides Mixture

10 Analytes

2,4-D	1000 µg/mL
2,4-DB	1000 µg/mL
dalapon	1000 µg/mL
dicamba	1000 µg/mL
dichlorprop	1000 µg/mL
dinoseb	1000 µg/mL
MCPA	10000 µg/mL
MCPP (mecoprop)	10000 µg/mL
2,4,5-T	1000 µg/mL
2,4,5-TP	1000 µg/mL

in methanol

**HBM-545-1** 1 x 1 mL

Volume discounts for  
individual solutions

Order 4–19 ampules of the same item and receive a **20% DISCOUNT**  
Order 20 or more ampules of the same item and receive a **30% DISCOUNT**





## Individual Internal &amp; Surrogate Standards for Methods 615

## All in 1 x 1 mL Ampules

dalapon	@ 200 µg/mL	methyl tert-butyl ether	PST-4040B200
dalapon	@ 200 µg/mL	methanol	PST-4040M200
dalapon methyl ester	@ 200 µg/mL	hexane	PST-171H200
dicamba	@ 200 µg/mL	methyl tert-butyl ether	PST-050B200
dicamba	@ 200 µg/mL	methanol	PST-050M200
dicamba methyl ester	@ 200 µg/mL	hexane	PST-4100H200
dichlorprop	@ 200 µg/mL	methyl tert-butyl ether	PST-370B200
dichlorprop	@ 200 µg/mL	methanol	PST-370M200
2,4-D	@ 200 µg/mL	methyl tert-butyl ether	PST-140B200
2,4-D	@ 200 µg/mL	methanol	PST-140M200
2,4-D methyl ester	@ 200 µg/mL	hexane	PST-150H200
2,4-DB	@ 200 µg/mL	methyl tert-butyl ether	PST-1170B200
2,4-DB	@ 200 µg/mL	methanol	PST-1170M200
2,4-DB methyl ester	@ 200 µg/mL	hexane	PST-1171H200
DCAA methyl ester	@ 200 µg/mL	hexane	PST-4065H200A01
dinoseb	@ 200 µg/mL	methyl tert-butyl ether	PST-450B200
dinoseb	@ 200 µg/mL	methanol	PST-450M200
dinoseb methyl ether	@ 200 µg/mL	hexane	PST-451H200
MCPA	@ 2000 µg/mL	methyl tert-butyl ether	PST-1180B2000
MCPA	@ 2000 µg/mL	methanol	PST-1180M2000
MCPA methyl ester	@ 2000 µg/mL	hexane	PST-1181H2000
MCPP	@ 2000 µg/mL	methyl tert-butyl ether	PST-1190B2000
MCPP	@ 2000 µg/mL	methanol	PST-1190M2000
MCPP methyl ester	@ 2000 µg/mL	hexane	PST-1191H2000
silvex methyl ester	@ 200 µg/mL	hexane	PST-4140H200
2,4,5-T	@ 200 µg/mL	methyl tert-butyl ether	PST-930B200
2,4,5-T	@ 200 µg/mL	methanol	PST-930M200
2,4,5-T methyl ester	@ 200 µg/mL	hexane	PST-931H200
2,4,5-TP	@ 200 µg/mL	methyl tert-butyl ether	PST-911B200
2,4,5-TP	@ 200 µg/mL	methanol	PST-911M200

## ORDERING IS EASY

## Online

www.ultrasci.com  
ultra@ultrasci.com

## Phone

800-338-1754  
Monday – Friday  
8:30 a.m. - 5:00 p.m. ET

## Fax

401-295-2330

## Mail

ULTRA Scientific  
250 Smith Street  
No. Kingstown, RI  
02852



## EPA METHOD 619

## TRIAZINE PESTICIDES

Method 619 is used to measure triazine pesticides. Samples are extracted, then quantitated using GC/NPD.

To read the complete method, log onto our website at [www.ultrasci.com](http://www.ultrasci.com).

Recommended Method 619  
Triazine Pesticides Mixture

## 11 Analytes

ametryn  
atraton  
atrazine  
prometon  
prometryn  
propazine  
secbumeton  
simazine  
simetryn  
terbuthylazine  
terbutryn

@ 100 µg/mL in acetone

**NPM-619-1** 1 x 1 mL

@ 100 µg/mL in methanol

**NPM-620-1** 1 x 1 mL

@ 500 µg/mL in acetone

**NPM-621-1** 1 x 1 mL

@ 1000 µg/mL in acetone

**NPM-625-1** 1 x 1 mL

Organophosphorous Pesticides  
Mixture

## 20 Analytes

bolstar  
chlorpyrifos  
coumaphos  
demeton (total, mixed isomers)  
diazinon  
dichlorvos  
disulfoton  
ethoprop  
fenchlorphos  
fensulfothion  
fenthion  
guthion  
merphos  
mevinphos  
naled  
methyl parathion  
phorate  
tetrachlorvinphos  
tokuthion  
trichloronate

@ 200 µg/mL in ethyl acetate

**SPM-825-1** 1 x 1 mL

## EPA METHOD 622

ORGANOPHOSPHORUS  
PESTICIDES

Method 622 is used to measure organophosphorus pesticides. Samples are extracted, then quantitated using GC/NPD or GC/FPD.

To read the complete method, log onto our website at [www.ultrasci.com](http://www.ultrasci.com).

## Recommended Standards

Calibration Standards: SPM-622A-1  
SPM-622C-1  
SPM-622D-1

Recommended Method 622  
Organophosphorus  
Pesticides Mixture

## 10 Analytes

aziphos methyl 150 µg/mL  
bolstar 15 µg/mL  
coumaphos 150 µg/mL  
demeton 25 µg/mL  
disulfoton 20 µg/mL  
fensulfothion 150 µg/mL  
fenthion 10 µg/mL  
phorate 15 µg/mL  
trichloronate 15 µg/mL  
tokuthion 50 µg/mL

in hexane

**SPM-622A-1** 1 x 1 mL

Recommended Method 622  
Organophosphorus  
Pesticides Mixture

## 7 Analytes

chlorpyrifos methyl 30 µg/mL  
chlorpyrifos 30 µg/mL  
diazinon 60 µg/mL  
ethoprop 25 µg/mL  
parathion methyl 30 µg/mL  
ronnel 30 µg/mL  
merphos 25 µg/mL

in hexane

**SPM-622C-1** 1 x 1 mL

Recommended Method 622  
Naled Solution

naled

@ 10 µg/mL in hexane

**SPM-622D-1** 1 x 1 mL

## EPA METHOD 624

## PURGEABLES

Method 624 is a GC/MS method for purgeables.

To read the complete method, log onto our website at [www.ultrasci.com](http://www.ultrasci.com).

## Recommended Standards

Calibration Standards: PMX-110-1  
HC-070-1

Surrogate Standard: STM-290N-1

## Technical Note

2-Chloroethyl vinyl ether is stable in solution by itself, but breaks down in the presence of other halocarbons. That is why ULTRA packages this analyte as a single component solution. If you prepare a working standard that contains 2-chloroethyl vinyl ether mixed with other halocarbons, be sure to monitor the stability of this analyte.

## EPA Method 624 Kit

## Kit – contains four ampules:

1 x 1 mL of each of the following standards

Purgeable Mixture (PMX-110-1)  
Chloroethyl Vinyl Ether Soln. (HC-070-1)  
Surrogate Std Mixture (STM-290N-1)  
BFB Solution (STS-110N-1)

**PMK-624** Kit

## 2-Chloroethyl Vinyl Ether Standards

2-chloroethyl vinyl ether

@ 100 µg/mL in methanol

**HC-070-1** 1 x 1 mL

@ 5000 µg/mL in methanol

**EPA-1016-1** 1 x 1 mL

Recommended Method 624  
Purgeable Mixtures

30 Analytes

benzene  
bromodichloromethane  
bromoform  
bromomethane  
carbon tetrachloride  
chlorobenzene  
chloroethane  
chloroform  
chloromethane  
dibromochloromethane  
1,2-dichlorobenzene  
1,3-dichlorobenzene  
1,4-dichlorobenzene  
1,1-dichloroethane  
1,2-dichloroethane  
1,1-dichloroethene  
trans-1,2-dichloroethene  
1,2-dichloropropane  
cis-1,3-dichloropropene  
trans-1,3-dichloropropene  
ethylbenzene  
methylene chloride  
1,1,2,2-tetrachloroethane  
tetrachloroethene  
toluene  
1,1,1-trichloroethane  
1,1,2-trichloroethane  
trichloroethene  
trichlorofluoromethane  
vinyl chloride

@ 20 µg/mL in methanol

**PMX-100-1** 1 x 1 mL

@ 100 µg/mL in methanol

**PMX-110-1** 1 x 1 mL

## Surrogate Standard Mixture

3 Analytes

4-bromofluorobenzene  
fluorobenzene  
pentafluorobenzene

@ 20,000 µg/mL in methanol

**STM-390-1** 1 x 1 mL

@ 1000 µg/mL in methanol

**STM-395-1** 1 x 1 mL

## Purgeable Mixture

25 Analytes

benzene  
bromodichloromethane  
bromoform  
carbon tetrachloride  
chlorobenzene  
chloroform  
dibromochloromethane  
1,2-dichlorobenzene  
1,3-dichlorobenzene  
1,4-dichlorobenzene  
1,1-dichloroethane  
1,2-dichloroethane  
1,1-dichloroethene  
trans-1,2-dichloroethene  
1,2-dichloropropane  
cis-1,3-dichloropropene  
trans-1,3-dichloropropene  
ethylbenzene  
methylene chloride  
1,1,2,2-tetrachloroethane  
tetrachloroethene  
toluene  
1,1,1-trichloroethane  
1,1,2-trichloroethane  
trichloroethene

@ 2000 µg/mL in methanol

**PMX-160-1** 1 x 1 mL

Recommended Method 624  
Surrogate Standard Mixture

3 Analytes

bromochloromethane  
2-bromo-1-chloropropane  
1,4-dichlorobutane

@ 1000 µg/mL in methanol

**STM-288-1** 1 x 1 mL

@ 1500 µg/mL in methanol

**STM-289-1** 1 x 1 mL

@ 2000 µg/mL in methanol

**STM-290N-1** 1 x 1 mL

@ 20,000 µg/mL in methanol

**STM-291-1** 1 x 1 mL

## EPA METHOD 624

(continued)

**Purgeable A Mixture**

11 Analytes

carbon tetrachloride  
chlorobenzene  
chloroform  
dibromochloromethane  
1,1-dichloroethane  
1,1-dichloroethene  
1,2-dichloropropane  
methylene chloride  
tetrachloroethene  
1,1,2-trichloroethane  
trichloroethene

@ 200 µg/mL in methanol

**XY-0115-1** 1 x 1 mL**Purgeable B Mixture**

12 Analytes

benzene  
bromodichloromethane  
bromoform  
1,2-dichloroethane  
trans-1,2-dichloroethene  
cis-1,3-dichloropropene  
trans-1,3-dichloropropene  
ethylbenzene  
1,1,2,2-tetrachloroethane  
toluene  
1,1,1-trichloroethane  
trichlorofluoromethane

@ 200 µg/mL in methanol

**XY-0116-1** 1 x 1 mL**Volatiles Mix 1 (VOA-1)**

11 Analytes

carbon tetrachloride  
chlorobenzene  
1,3-dichlorobenzene  
1,4-dichlorobenzene  
1,2-dichloroethane  
1,1-dichloroethene  
trans-1,2-dichloroethene  
1,2-dichloropropane  
ethylbenzene  
tetrachloroethene  
1,1,2-trichloroethane

@ 50 µg/mL in methanol

**EPA-2041N-1** 1 x 1 mL

@ 500 µg/mL in methanol

**EPA-2141N-1** 1 x 1 mL**Purgeable Gas Mixtures**

6 Analytes

bromomethane  
chloroethane  
chloromethane  
dichlorodifluoromethane  
trichlorofluoromethane  
vinyl chloride

@ 200 µg/mL in methanol

**DWM-584-1** 1 x 1 mL

@ 2000 µg/mL in methanol

**DWM-544-1** 1 x 1 mL**Purgeable Gas Mixture**

5 Analytes

bromomethane  
chloroethane  
chloromethane  
dichlorodifluoromethane  
vinyl chloride

@ 100 µg/mL in methanol

**HCM-601G-1** 1 x 1 mL**Chlorinated Benzenes Mixture**

3 Analytes

1,2-dichlorobenzene  
1,3-dichlorobenzene  
1,4-dichlorobenzene

@ 200 µg/mL in methanol

**CHM-200-1** 1 x 1 mL

@ 2000 µg/mL in methanol

**CHM-205-1** 1 x 1 mL**Volatiles Mix 2 (VOA-2)**

12 Analytes

benzene  
bromodichloromethane  
bromoform  
chloroform  
dibromochloromethane  
1,2-dichlorobenzene  
1,1-dichloroethane  
methylene chloride  
1,1,2,2-tetrachloroethane  
toluene  
1,1,1-trichloroethane  
trichloroethene

@ 50 µg/mL in methanol

**EPA-2042N-1** 1 x 1 mL

@ 500 µg/mL in methanol

**EPA-2142N-1** 1 x 1 mL

**Calibration Mixture****12 Analytes**

benzene  
 carbon tetrachloride  
 chlorobenzene  
 2-chloroethylvinyl ether  
 dibromochloromethane  
 1,1-dichloroethane  
 1,1-dichloroethene  
 1,2-dichloropropane  
 methylene chloride  
 tetrachloroethene  
 1,1,2-trichloroethane  
 trichloroethene

@ 2000 µg/mL in methanol

**US-430-1****1 x 1 mL****Calibration Mixture****14 Analytes**

bromodichloromethane  
 bromoform  
 chloroform  
 1,2-dichlorobenzene  
 1,3-dichlorobenzene  
 1,4-dichlorobenzene  
 1,2-dichloroethane  
 trans-1,2-dichloroethene  
 cis-1,3-dichloropropene  
 trans-1,3-dichloropropene  
 ethylbenzene  
 1,1,2,2-tetrachloroethane  
 1,1,1-trichloroethane  
 toluene

@ 2000 µg/mL in methanol

**US-425-1****1 x 1 mL****Trihalomethanes Mixture****4 Analytes**

bromodichloromethane  
 bromoform  
 chloroform  
 dibromochloromethane

@ 2000 µg/mL in methanol

**THM-515-1****1 x 1 mL****Calibration Mixture****27 Analytes**

acrylonitrile  
 benzene  
 bromodichloromethane  
 bromoform  
 carbon tetrachloride  
 chlorobenzene  
 chloroform  
 dibromochloromethane  
 1,2-dichlorobenzene  
 1,3-dichlorobenzene  
 1,4-dichlorobenzene  
 1,1-dichloroethane  
 1,2-dichloroethane  
 1,1-dichloroethene  
 trans-1,2-dichloroethene  
 1,2-dichloropropane  
 cis-1,3-dichloropropene  
 trans-1,3-dichloropropene  
 ethylbenzene  
 methylene chloride  
 tetrachloroethylene  
 1,1,2,2-tetrachloroethane  
 toluene  
 1,2,4-trichlorobenzene  
 1,1,1-trichloroethane  
 1,1,2-trichloroethane  
 trichloroethene

@ 200 µg/mL in methanol

**PMX-185-1****1 x 1 mL****Internal, Surrogate, and GC/MS Calibration Standards for Method 624**

@ 200 µg/mL in methanol

**1 x 1 mL Ampules**

benzene-d <sub>6</sub>	STS-101-1
bromochloromethane	STS-181-1
1,2-dichloroethane-d <sub>4</sub>	STS-122-1
1,4-dichlorobutane	STS-202-1
1,4-difluorobenzene	STS-131-1
ethylbenzene-d <sub>10</sub>	STS-162-1
fluorobenzene	STS-164-1
pentafluorobenzene	STS-171-1

@ 1000 µg/mL in methanol

**1 x 1 mL Ampules**

4-bromofluorobenzene	STS-114-1
1,2-dichloroethane-d <sub>4</sub>	STS-121-1
1,4-dichlorobutane	STS-201-1
ethylbenzene-d <sub>10</sub>	STS-163-1

All @ 2000 µg/mL in methanol

**1 x 1 mL Ampules**

bromochloromethane	STS-180-1
2-bromo-1-chloropropane	STS-190-1
4-bromofluorobenzene	STS-110N-1
1,4-dichlorobutane	STS-200-1
1,2-dichloroethane-d <sub>4</sub>	STS-120-1
1,4-difluorobenzene	STS-130-1
ethylbenzene-d <sub>10</sub>	STS-150-1
fluorobenzene	STS-160-1
pentafluorobenzene	STS-170-1

## EPA METHOD 624

(continued)

## VOC Mixture

## 51 Analytes

acetone	1,2-dichlorobenzene	methyl tert-butyl ether (MTBE)
acetonitrile	1,3-dichlorobenzene	MIBK
acrylonitrile	1,4-dichlorobenzene	naphthalene
benzene	dichlorodifluoromethane	styrene
bromodichloromethane	1,1-dichloroethane	1,1,2,2-tetrachloroethane
bromoform	1,2-dichloroethane	tetrachloroethylene
bromomethane	1,1-dichloroethene	toluene
carbon disulfide	cis-1,2-dichloroethene	1,2,4-trichlorobenzene
carbon tetrachloride	trans-1,2-dichloroethene	1,1,1-trichloroethane
chlorobenzene	1,2-dichloropropane	1,1,2-trichloroethane
chloroethane	cis-1,3-dichloropropene	trichloroethylene
chloroform	trans-1,3-dichloropropene	trichlorofluoromethane
chloromethane	ethylbenzene	1,2,3-trichloropropane
dibromochloromethane	hexachlorobutadiene	vinyl chloride
1,2-dibromoethane	2-hexanone	o-xylene
dibromomethane	MEK	m-xylene
1,2-dibromo-3-chloropropane	methylene chloride	p-xylene

@ 2000 µg/mL in methanol

PMX-190-1

1 x 1 mL

## VOC Mixture

## 52 Analytes

acetone	1,3-dichlorobenzene	naphthalene
acetonitrile	1,4-dichlorobenzene	styrene
acrylonitrile	1,1-dichloroethane	1,1,1,2-tetrachloroethane
benzene	1,2-dichloroethane	1,1,2,2-tetrachloroethane
bromodichloromethane	1,1-dichloroethene	tetrachloroethylene
bromoform	cis-1,2-dichloroethene	toluene
bromomethane	trans-1,2-dichloroethene	1,2,4-trichlorobenzene
carbon disulfide	dichlorodifluoromethane	1,1,1-trichloroethane
carbon tetrachloride	1,2-dichloropropane	1,1,2-trichloroethane
chlorobenzene	cis-1,3-dichloropropene	trichloroethylene
chloroethane	trans-1,3-dichloropropene	trichlorofluoromethane
chloroform	ethylbenzene	1,2,3-trichloropropane
chloromethane	hexachlorobutadiene	vinyl chloride
dibromomethane	2-hexanone	o-xylene
1,2-dibromoethane	MEK	m-xylene
dibromochloromethane	methylene chloride	p-xylene
1,2-dibromo-3-chloropropane	methyl tert-butyl ether (MTBE)	
1,2-dichlorobenzene	MIBK	

@ 200 µg/mL in methanol

PMX-200-1

1 x 1 mL

### Calibration Mixture

#### 31 Analytes

benzene	1,1-dichloroethene	isopropyl ether
bromodichloromethane	cis-1,2-dichloroethene	naphthalene
bromoform	trans-1,2-dichloroethene	1,1,2,2-tetrachloroethane
carbon tetrachloride	1,2-dichloropropane	trichloroethene
chlorobenzene	cis-1,3-dichloropropene	1,1,1-trichloroethane
chloroform	trans-1,3-dichloropropene	1,1,2-trichloroethane
dibromochloromethane	ethylbenzene	o-xylene
1,2-dibromoethane	methylene chloride	m-xylene
1,3-dichlorobenzene	tetrachloroethylene	p-xylene
1,4-dichlorobenzene	toluene	
1,1-dichloroethane	methyl tert-butyl ether (MTBE)	

@ 1000 µg/mL in methanol

**PMX-205-1** 1 x 1 mL

### Calibration Mixture

#### 29 Analytes

bromodichloromethane	1,2-dichloroethane	toluene
bromoform	trans-1,2-dichloroethene	1,2,3,4-tetrachlorobenzene
chlorobenzene	1,2-dichloropropane	1,1,2,2-tetrachloroethane
chloroform	1,2-dinitrobenzene	1,2,3-trichlorobenzene
chloromethane	1,3-dinitrobenzene	1,1,1-trichloroethane
dibromochloromethane	1,4-dinitrobenzene	1,1,2-trichloroethane
1,2-dichlorobenzene	ethylbenzene	trichloroethene
1,3-dichlorobenzene	methylene chloride	1,1-dichloroethene
1,4-dichlorobenzene	pentachlorobenzene	vinyl chloride
1,1-dichloroethane	tetrachloroethylene	

@ 1000 µg/mL in methanol

**PMX-210-1** 1 x 1 mL

### Calibration Mixture

#### 32 Analytes

acrylonitrile	dibromochloromethane	ethylbenzene
benzene	1,2-dichlorobenzene	methylene chloride
bromodichloromethane	1,3-dichlorobenzene	1,1,2,2-tetrachloroethane
bromoform	1,4-dichlorobenzene	tetrachloroethylene
bromomethane	1,1-dichloroethane	toluene
carbon tetrachloride	1,2-dichloroethane	1,1,1-trichloroethane
chlorobenzene	1,1-dichloroethene	1,1,2-trichloroethane
chloroethane	trans-1,2-dichloroethene	trichloroethene
2-chloroethylvinyl ether	1,2-dichloropropane	trichlorofluoromethane
chloroform	cis-1,3-dichloropropene	vinyl chloride
chloromethane	trans-1,3-dichloropropene	

@ 40 µg/mL in methanol

**PMX-215-1** 1 x 1 mL

## EPA METHOD 624

(continued)

**VOC Mixture**

## 13 Analytes

acetonitrile  
acrylonitrile  
acetone  
bromodichloromethane  
bromoform  
carbon disulfide  
2-hexanone  
chloroform  
dibromochloromethane  
1,2-dibromo-3-chloropropane  
1,2-dibromoethane  
MEK  
MIBK

@ 2000 µg/mL in methanol

**PMX-220-1** 1 x 1 mL**Purgeable Mixture**

## 8 Analytes

benzene  
bromodichloromethane  
2-chloroethylvinyl ether  
cis-1,3-dichloropropene  
trans-1,3-dichloropropene  
ethylbenzene  
toluene  
1,1,1-trichloroethane

@ 200 µg/mL in methanol

**PMX-240-1** 1 x 1 mL

@ 2000 µg/mL in methanol

**PMX-245-1** 1 x 1 mL**Purgeable Gas Mixture**

## 5 Analytes

bromomethane  
chloroethane  
chloromethane  
trichlorofluoromethane  
vinyl chloride

@ 200 µg/mL in methanol

**DWM-552-1** 1 x 1 mL

@ 2000 µg/mL in methanol

**DWM-551-1** 1 x 1 mL**Purgeable Mixture**

## 14 Analytes

2-chloroethylvinyl ether  
carbon tetrachloride  
chlorobenzene  
chloroform  
dibromochloromethane  
1,2-dichlorobenzene  
1,1-dichloroethane  
1,1-dichloroethene  
1,2-dichloropropane  
methylene chloride  
tetrachloroethylene  
1,1,2-trichloroethane  
trichloroethene  
trichlorofluoromethane

@ 2000 µg/mL in methanol

**PMX-225-1** 1 x 1 mL**Calibration Mixture**

## 34 Analytes

acetone  
benzene  
bromodichloromethane  
bromoform  
bromomethane  
carbon tetrachloride  
chlorobenzene  
chloroethane  
chloroform  
chloromethane  
2-chloroethylvinyl ether  
1,2-dichlorobenzene  
1,3-dichlorobenzene  
1,4-dichlorobenzene  
1,1-dichloroethane  
1,2-dichloroethane  
1,1-dichloroethene

@ 200 µg/mL in methanol

**PMX-250-1** 1 x 1 mL**Purgeable Mixture**

## 15 Analytes

bromoform  
carbon tetrachloride  
chlorobenzene  
chloroform  
dibromochloromethane  
1,1-dichloroethane  
1,2-dichloroethane  
1,1-dichloroethene  
1,2-dichloropropane  
methylene chloride  
1,1,2,2-tetrachloroethane  
tetrachloroethene  
trans-1,2-dichloroethene  
1,1,2-trichloroethane  
trichloroethene

@ 200 µg/mL in methanol

**PMX-230-1** 1 x 1 mL

@ 2000 µg/mL in methanol

**PMX-235-1** 1 x 1 mL

trans-1,2-dichloroethene  
1,2-dichloropropane  
cis-1,3-dichloropropene  
trans-1,3-dichloropropene  
dibromochloromethane  
dichlorodifluoromethane  
ethylbenzene  
methylene chloride  
methyl tert-butyl ether (MTBE)  
1,1,2,2-tetrachloroethane  
tetrachloroethene  
toluene  
1,1,1-trichloroethane  
1,1,2-trichloroethane  
trichloroethene  
trichlorofluoromethane  
vinyl chloride



**Purgeable Mixture**

31 Analytes

benzene  
 bromodichloromethane  
 bromoform  
 bromomethane  
 carbon tetrachloride  
 chlorobenzene  
 chloroethane  
 chloroform  
 chloromethane  
 dibromochloromethane  
 1,2-dichlorobenzene  
 1,3-dichlorobenzene  
 1,4-dichlorobenzene  
 1,1-dichloroethane  
 1,2-dichloroethane  
 1,1-dichloroethene  
 trans-1,2-dichloroethene  
 dichlorodifluoromethane  
 1,2-dichloropropane  
 cis-1,3-dichloropropene  
 trans-1,3-dichloropropene  
 ethylbenzene  
 methylene chloride  
 1,1,2,2-tetrachloroethane  
 tetrachloroethene  
 toluene  
 1,1,1-trichloroethane  
 1,1,2-trichloroethane  
 trichloroethene  
 trichlorofluoromethane  
 vinyl chloride

@ 200 µg/mL in methanol

**PMX-105-1****1 x 1 mL****Purgeable Mixture**

31 Analytes

benzene  
 bromodichloromethane  
 bromoform  
 bromomethane  
 carbon tetrachloride  
 chlorobenzene  
 chloroethane  
 chloroform  
 chloromethane  
 2-chloroethylvinyl ether  
 dibromochloromethane  
 1,2-dichlorobenzene  
 1,3-dichlorobenzene  
 1,4-dichlorobenzene  
 1,1-dichloroethane  
 1,2-dichloroethane  
 1,1-dichloroethene  
 trans-1,2-dichloroethene  
 1,2-dichloropropane  
 cis-1,3-dichloropropene  
 trans-1,3-dichloropropene  
 ethylbenzene  
 methylene chloride  
 1,1,2,2-tetrachloroethane  
 tetrachloroethene  
 toluene  
 1,1,1-trichloroethane  
 1,1,2-trichloroethane  
 trichloroethene  
 trichlorofluoromethane  
 vinyl chloride

@ 200 µg/mL in methanol

**PMX-111-1****1 x 1 mL****Purgeable Mixture**

21 Analytes

benzene  
 carbon tetrachloride  
 chlorobenzene  
 1,2-dichlorobenzene  
 1,3-dichlorobenzene  
 1,4-dichlorobenzene  
 1,1-dichloroethane  
 1,2-dichloroethane  
 1,1-dichloroethene  
 trans-1,2-dichloroethene  
 1,2-dichloropropane  
 cis-1,3-dichloropropene  
 trans-1,3-dichloropropene  
 ethylbenzene  
 methylene chloride  
 1,1,2,2-tetrachloroethane  
 tetrachloroethene  
 toluene  
 1,1,1-trichloroethane  
 1,1,2-trichloroethane  
 trichloroethene

@ 2000 µg/mL in methanol

**PMX-170-1****1 x 1 mL**

## Volume discounts for individual solutions

Order 4–19 ampules of the same item and receive a **20% DISCOUNT**  
 Order 20 or more ampules of the same item and receive a **30% DISCOUNT**



## EPA METHOD 625

## BASE/NEUTRALS AND ACIDS

Method 625 is a GC/MS method for extractables.

To read the complete method, log onto our website at [www.ultrasci.com](http://www.ultrasci.com).

## Recommended Standards

Calibration Standards: 625-MA-1  
PHM-604-1  
PPM-625B-1

## Technical Notes

The base/neutral extraction in this method significantly reduces the recovery of phenol, 2-methylphenol and 2,4-dimethylphenol, therefore results obtained with this method are minimum concentrations.

The packed columns recommended for the basic fraction of this method may not be adequate to resolve certain isomeric pairs. These pairs include: anthracene and phenanthrene; chrysene and benz[a]anthracene; benzo[b]fluoranthene and benzo[k]fluoranthene. Alternative methods, such as method 610, should be employed.

## EPA Method 625 Kit

## Kit – contains five ampules:

1 x 1 mL of each of the following standards  
B/N Extractables Mixture (625-MA-1)  
Acid Extractables Mixture (PHM-604-1)  
B/N Surrogate Std Mixture (ISM-280N-1)  
Acid Surrogate Std Mixture (ISM-290N-1)  
Internal Std Mixture (US-108N)

SVK-625A

Kit

## Recommended Method 625 Base/Neutrals Extractables Mixture

## 41 Analytes

acenaphthene	butyl benzyl phthalate	di-n-octyl phthalate
acenaphthylene	2-chloronaphthalene	fluoranthene
anthracene	4-chlorophenyl phenyl ether	fluorene
benz[a]anthracene	chrysene	hexachlorobenzene
benzo[b]fluoranthene	dibenz[a,h]anthracene	hexachlorobutadiene
benzo[k]fluoranthene	di-n-butyl phthalate	hexachloroethane
benzo[ghi]perylene	1,2-dichlorobenzene	indeno[1,2,3-cd]pyrene
benzo[a]pyrene	1,3-dichlorobenzene	isophorone
bis(2-chloroethyl) ether	1,4-dichlorobenzene	naphthalene
bis(2-chloroethoxy) methane	3,3-dichlorobenzidine	nitrobenzene
bis(2-ethylhexyl) phthalate	diethyl phthalate	N-nitrosodi-n-propylamine
bis(2-chloroisopropyl) ether	dimethyl phthalate	phenanthrene
4-bromophenyl phenyl ether	2,4-dinitrotoluene	pyrene
	2,6-dinitrotoluene	1,2,4-trichlorobenzene

@ 20 µg/mL in methanol/methylene chloride

**625-MA-1 1 x 1 mL**

## Recommended Method 625 Acid Extractables Mixture

## 11 Analytes

4-chloro-3-methylphenol  
2-chlorophenol  
2,4-dichlorophenol  
2,4-dimethylphenol  
2,4-dinitrophenol  
2-methyl-4,6-dinitrophenol  
2-nitrophenol  
4-nitrophenol  
pentachlorophenol  
phenol  
2,4,6-trichlorophenol

@ 20 µg/mL in methanol

**PHM-604-1 1 x 1 mL**

## Base/Neutrals Surrogate Mixture

## 3 Analytes

nitrobenzene-d5  
2-fluorobiphenyl  
p-terphenyl-d14

@ 1000 µg/mL in methylene chloride

**ISM-280N-1 1 x 1 mL**

## Internal Standard Mixtures

## 6 Analytes

acenaphthene-d10  
chrysene-d12  
1,4-dichlorobenzene-d4  
naphthalene-d8  
perylene-d12  
phenanthrene-d10

@ 2000 µg/mL in methylene chloride

**ISM-560-1 1 x 1 mL**

@ 4000 µg/mL in methylene chloride

**US-108N-1 1 x 1 mL**

## Acids Surrogate Standard Mixture

## 3 Analytes

2-fluorophenol  
phenol-d5  
2,4,6-tribromophenol

@ 2000 µg/mL in methanol

**ISM-290N-1 1 x 1 mL**

**Base/Neutrals Extractables Mixtures***44 Analytes*

acenaphthene	butyl benzyl phthalate	fluorene
acenaphthylene	2-chloronaphthalene	hexachlorobenzene
anthracene	4-chlorophenyl phenyl ether	hexachlorobutadiene
azobenzene	chrysene	hexachlorocyclopentadiene
benz[a]anthracene	dibenz[a,h]anthracene	hexachloroethane
benzo[b]fluoranthene	di-n-butyl phthalate	indeno[1,2,3-cd]pyrene
benzo[k]fluoranthene	1,2-dichlorobenzene	isophorone
benzo[ghi]perylene	1,3-dichlorobenzene	naphthalene
benzo[a]pyrene	1,4-dichlorobenzene	nitrobenzene
bis(2-chloroethyl) ether	diethyl phthalate	N-nitrosodimethylamine
bis(2-chloroethoxy) methane	dimethyl phthalate	N-nitrosodi-n-propylamine
bis(2-ethylhexyl) phthalate	2,4-dinitrotoluene	N-nitrosodiphenylamine
bis(2-chloroisopropyl) ether	2,6-dinitrotoluene	phenanthrene
4-bromophenyl phenyl ether	di-n-octyl phthalate	pyrene
	fluoranthene	1,2,4-trichlorobenzene

@ 2000 µg/mL in methylene chloride/benzene/acetonitrile (2:2:1)

**SVM-102-1 1 x 1 mL**

@ 500 µg/mL in methylene chloride

**SVM-625-1 1 x 1 mL**

**Recommended Method 625 Pesticide Extractables Mixture***11 Analytes*

aldrin
beta-BHC
delta-BHC
4,4'-DDD
4,4'-DDE
4,4'-DDT
dieldrin
endosulfan sulfate
endrin aldehyde
heptachlor
heptachlor epoxide (B)

@ 20 µg/mL in methanol

**PPM-625B-1 1 x 1 mL**

**GC/MS Base/Neutrals Mix 1 (GBN-1)***19 Analytes*

benz[a]anthracene
benzo[k]fluoranthene
bis(2-chloroethoxy)methane
bis(2-chloroethyl) ether
2-chloronaphthalene
di-n-butyl phthalate
1,2-dichlorobenzene
1,3-dichlorobenzene
diethyl phthalate
2,4-dinitrotoluene
2,6-dinitrotoluene
di-n-octyl phthalate
hexachlorobenzene
hexachlorobutadiene
isophorone
N-nitrosodi-n-propylamine
phenanthrene
pyrene
1,2,4-trichlorobenzene

@ 100 µg/mL in methanol

**EPA-2010N-1 1 x 1 mL**

**GC/MS Base/Neutrals Mix 2 (GBN-2)***18 Analytes*

acenaphthene
anthracene
benzo[b]fluoranthene
benzo[ghi]perylene
benzo[a]pyrene
bis(2-ethylhexyl) phthalate
4-bromophenyl phenyl ether
butyl benzyl phthalate
4-chlorophenyl phenyl ether
chrysene
dibenz[a,h]anthracene
1,4-dichlorobenzene
dimethyl phthalate
fluoranthene
fluorene
hexachloroethane
naphthalene
nitrobenzene

@ 100 µg/mL in acetone

**EPA-2011N-1 1 x 1 mL**

**Acid Extractables Mixture (GAC)***11 Analytes*

4-chloro-3-methylphenol
2-chlorophenol
2,4-dichlorophenol
2,4-dimethylphenol
2,4-dinitrophenol
2-methyl-4,6-dinitrophenol
2-nitrophenol
4-nitrophenol
pentachlorophenol
phenol
2,4,6-trichlorophenol

@ 100 µg/mL in methanol

**EPA-2008N-1 1 x 1 mL**

## EPA METHOD 625 HIGH CONCENTRATION CALIBRATION STANDARDS

**GC/MS High Concentration Kit****Kit – contains nine ampules:**

1 x 1 mL of each of the following solutions

Base/Neutral Mixture #1	(US-100N)
Base/Neutral Mixture #2	(US-101N)
Pesticides Mixture	(US-102BN)
Toxic Substances Mix #1	(US-103N)
Toxic Substances Mix #2	(US-104N)
Benzidines Mixture	(US-105N)
PAH Mixture	(US-106N)
Phenols Mixture	(US-107N)
Internal Standards Mixture	(US-108N)

**US-109K Kit****Base/Neutrals Mix #1**

14 Analytes

bis(2-chloroethoxy)methane  
 bis(2-chloroethyl) ether  
 bis(2-ethylhexyl) phthalate  
 bis(2-chloroisopropyl) ether  
 4-bromophenyl phenyl ether  
 butylbenzyl phthalate  
 4-chlorophenyl phenyl ether  
 diethyl phthalate  
 dimethyl phthalate  
 di-n-butyl phthalate  
 di-n-octyl phthalate  
 N-nitrosodimethylamine  
 N-nitrosodi-n-propylamine  
 N-nitrosodiphenylamine

@ 2000 µg/mL in methylene chloride

**US-100N-1 1 x 1 mL****Base/Neutrals Mix #2**

14 Analytes

azobenzene  
 2-chloronaphthalene  
 1,2-dichlorobenzene  
 1,3-dichlorobenzene  
 1,4-dichlorobenzene  
 2,4-dinitrotoluene  
 2,6-dinitrotoluene  
 hexachlorobenzene  
 hexachlorobutadiene  
 hexachlorocyclopentadiene  
 hexachloroethane  
 isophorone  
 nitrobenzene  
 1,2,4-trichlorobenzene

@ 2000 µg/mL in methylene chloride

**US-101N-1 1 x 1 mL****Benzidines Mixture**

2 Analytes

benzidine  
 3,3-dichlorobenzidine

@ 2000 µg/mL in methanol

**US-105N-1 1 x 1 mL****Toxic Substances Mix #1**

4 Analytes

benzoic acid  
 2-methylphenol  
 4-methylphenol  
 2,4,5-trichlorophenol

@ 2000 µg/mL in methylene chloride

**US-103N-1 1 x 1 mL****Toxic Substances Mix #2**

8 Analytes

aniline  
 benzyl alcohol  
 4-chloroaniline  
 dibenzofuran  
 2-methylnaphthalene  
 2-nitroaniline  
 3-nitroaniline  
 4-nitroaniline

@ 2000 µg/mL in methylene chloride

**US-104N-1 1 x 1 mL****Internal Standard Mixtures**

6 Analytes

acenaphthene-d10  
 chrysene-d12  
 1,4-dichlorobenzene-d4  
 naphthalene-d8  
 perylene-d12  
 phenanthrene-d10

@ 2000 µg/mL in methylene chloride

**ISM-560-1 1 x 1 mL**

@ 4000 µg/mL in methylene chloride

**US-108N-1 1 x 1 mL****Phenols Mixture**

11 Analytes

4-chloro-3-methylphenol  
 2-chlorophenol  
 2,4-dichlorophenol  
 2,4-dimethylphenol  
 2,4-dinitrophenol  
 2-methyl-4,6-dinitrophenol  
 2-nitrophenol  
 4-nitrophenol  
 pentachlorophenol  
 phenol  
 2,4,6-trichlorophenol

@ 2000 µg/mL in methylene chloride

**US-107N-1 1 x 1 mL****Method 625 Additions Mixture**

7 Analytes

acetophenone  
 carbazole  
 n-decane  
 2,3-dichloroaniline  
 n-octadecane  
 pyridine  
 alpha-terpineol

@ 2000 µg/mL in methylene chloride

**US-136-1 1 x 1 mL**

## SURROGATE AND INTERNAL STANDARDS FOR EPA METHOD 625

### Base/Neutrals Surrogate Mixture

3 Analytes

nitrobenzene-d5  
2-fluorobiphenyl  
p-terphenyl-d14

@ 1000 µg/mL in methylene chloride

**ISM-280N-1**                      **1 x 1 mL**

@ 1000 µg/mL in acetone/methylene chloride

**ISM-281-1**                      **1 x 1 mL**

@ 5000 µg/mL in methylene chloride

**US-216-1**                      **1 x 1 mL**

### Acids Surrogate Standard Mixture

3 Analytes

2-fluorophenol  
phenol-d5  
2,4,6-tribromophenol

@ 2000 µg/mL in methanol

**ISM-290N-1**                      **1 x 1 mL**

### Internal Standard Mixtures

6 Analytes

acenaphthene-d10  
chrysene-d12  
1,4-dichlorobenzene-d4  
naphthalene-d8  
perylene-d12  
phenanthrene-d10

@ 2000 µg/mL in methylene chloride

**ISM-560-1**                      **1 x 1 mL**

@ 4000 µg/mL in methylene chloride

**US-108N-1**                      **1 x 1 mL**

@ 2000 µg/mL in methylene chloride/  
benzene (1:1)

**ISM-560-1**                      **1 x 1 mL**

### Volume discounts for individual solutions

Order 4–19 ampules of the same item and receive a **20% DISCOUNT**  
Order 20 or more ampules of the same item and receive a **30% DISCOUNT**



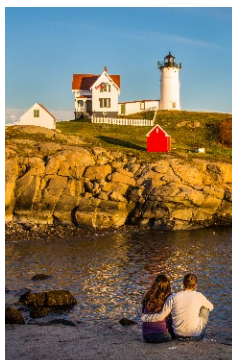
## [WWW.ULTRASCI.COM](http://WWW.ULTRASCI.COM)

### Download and Print from Our Online Library

The ULTRA Scientific website allows you to easily obtain up-to-date documents that are related not only to our business, but to the industry in general.

#### Choose from:

- ✓ ULTRA Scientific catalog
- ✓ ULTRA Scientific brochures
- ✓ SDS's (GHS compliant)
- ✓ EPA Methods
- ✓ And more!



## GC/MS CALIBRATION AND TUNING STANDARDS EPA METHOD 625

**Extractables GC/MS  
Calibration Standard**

decafluorotriphenylphosphine (DFTPP)	
@ 100 µg/mL in methylene chloride	
<b>IST-341-1</b>	<b>1 x 1 mL</b>
@ 1000 µg/mL in acetone	
<b>47995N-1</b>	<b>1 x 1 mL</b>

**Base/Neutrals Test Mixture**

2 Analytes	
benzidine	2000 µg/mL
decafluorotriphenylphosphine	1000 µg/mL
<i>In methylene chloride</i>	
<b>GCM-130-1</b>	<b>1 x 1 mL</b>

**Base/Neutrals Test Mixture**

2 Analytes	
benzidine	500 µg/mL
decafluorotriphenylphosphine	250 µg/mL
<i>in methylene chloride</i>	
<b>GCM-151-1</b>	<b>1 x 1 mL</b>

**Base/Neutrals Test Mixture**

2 Analytes	
benzidine	50 µg/mL
decafluorotriphenylphosphine	25 µg/mL
<i>in methylene chloride</i>	
<b>GCM-156-1</b>	<b>1 x 1 mL</b>

**Acids Test Mixture**

2 Analytes	
pentachlorophenol	
decafluorotriphenylphosphine (DFTPP)	
@ 1000 µg/mL in methylene chloride	
<b>GCM-140-1</b>	<b>1 x 1 mL</b>
@ 250 µg/mL in methylene chloride	
<b>GCM-152-1</b>	<b>1 x 1 mL</b>
@ 25 µg/mL in methylene chloride	
<b>GCM-155-1</b>	<b>1 x 1 mL</b>

**Extractables GC/MS Calibration Kit****Kit – contains five ampules:**

1 x 1 mL of each of the following standards	
DFTPP Solution	(47995N-1)
Benzidine Solution	(GCS-110-1)
Pentachlorophenol Soln .	(GCS-120-1)
Base/Neutrals Test Mix	(GCM-130-1)
Acids Test Mixture	(GCM-140-1)

**GCM-100K****Kit****Extractables GC/MS Calibration Standards**

benzidine		pentachlorophenol	
@ 2000 µg/mL in methylene chloride		@ 1000 µg/mL in methylene chloride	
<b>GCS-110-1</b>	<b>1 x 1 mL</b>	<b>GCS-120-1</b>	<b>1 x 1 mL</b>
@ 500 µg/mL in methylene chloride		@ 250 µg/mL in methylene chloride	
<b>GCS-112-1</b>	<b>1 x 1 mL</b>	<b>GCS-122-1</b>	<b>1 x 1 mL</b>
@ 50 µg/mL in methylene chloride		@ 25 µg/mL in methylene chloride	
<b>GCS-113-1</b>	<b>1 x 1 mL</b>	<b>GCS-124-1</b>	<b>1 x 1 mL</b>

**Volume discounts for  
individual solutions**

Order 4–19 ampules of the same item  
and receive a **20% DISCOUNT**  
Order 20 or more ampules of the same  
item and receive a **30% DISCOUNT**



## EPA METHOD 625 ADDITIONAL CALIBRATION STANDARDS

**Base/Neutrals Extractables Mixture**

12 Analytes

acenaphthylene  
benzo[b]fluoranthene  
bis(2-chloroethyl) ether  
bis(2-ethylhexyl) phthalate  
bis(2-chloroisopropyl) ether  
4-bromophenyl phenyl ether  
di-n-butyl phthalate  
1,4-dichlorobenzene  
3,3-dichlorobenzidine  
dimethyl phthalate  
2,6-dinitrotoluene  
nitrobenzene

@ 500 µg/mL in methylene chloride

**SVM-110-1** 1 x 1 mL**Base/Neutrals Extractables Mixture**

15 Analytes

acenaphthene  
anthracene  
benz[a]anthracene  
bis(2-chloroethoxy)methane  
chrysene  
dibenz[a,h]anthracene  
1,2-dichlorobenzene  
1,3-dichlorobenzene  
diethyl phthalate  
2,4-dinitrotoluene  
fluorene  
hexachlorobenzene  
hexachlorobutadiene  
naphthalene  
pyrene

@ 500 µg/mL in methylene chloride

**SVM-111-1** 1 x 1 mL**Base/Neutrals Extractables Mixture**

11 Analytes

azobenzene  
butyl benzyl phthalate  
2-chloronaphthalene  
fluoranthene  
hexachlorocyclopentadiene  
hexachloroethane  
isophorone  
N-nitrosodi-n-propylamine  
N-nitrosodiphenylamine  
phenanthrene  
1,2,4-trichlorobenzene

@ 500 µg/mL in methylene chloride

**SVM-112-1** 1 x 1 mL

@ 200 µg/mL in

methanol/methylene chloride

**XY-0122-1** 1 x 1 mL**Base/Neutrals Extractables Mixture**

8 Analytes

benzidine  
benzo[k]fluoranthene  
benzo[ghi]perylene  
benzo[a]pyrene  
4-chlorophenyl phenyl ether  
di-n-octyl phthalate  
indeno[1,2,3-cd]pyrene  
N-nitrosodimethylamine

@ 500 µg/mL in methylene chloride

**SVM-113-1** 1 x 1 mL**Wastewater Pesticides Mixture**

7 Analytes

aldrin  
4,4'-DDD  
4,4'-DDE  
4,4'-DDT  
dieldrin  
heptachlor  
heptachlor epoxide - isomer B

@ 100 µg/mL in acetone

**PPM-608G-1** 1 x 1 mL**Chlordane and Toxaphene Mixture**

2 Analytes

chlordane 2000 µg/mL  
toxaphene 4000 µg/mL

in methanol

**TCLP-533-1** 1 x 1 mL**Chlordane & Toxaphene Solution**

2 Analytes

chlordane 20 µg/mL  
toxaphene 200 µg/mL

in methanol

**TCLP-535-1** 1 x 1 mL

## ORDERING IS EASY

**Online**

www.ultrasci.com  
ultra@ultrasci.com

**Phone**

800-338-1754  
Monday – Friday  
8:30 a.m. - 5:00 p.m. ET

**Fax**

401-295-2330

**Mail**

ULTRA Scientific  
250 Smith Street  
No. Kingstown, RI  
02852



## EPA METHOD 625 ADDITIONAL CALIBRATION STANDARDS

(continued)

**Aroclors Mixture**

4 Analytes

Aroclor 1016  
Aroclor 1232  
Aroclor 1248  
Aroclor 1260

@ 20 µg/mL in methanol

**XY-0127-1** 1 x 1 mL

@ 200 µg/mL in methylene chloride

**US-226-1** 1 x 1 mL

@ 200 µg/mL in hexane

**US-228-1** 1 x 1 mL

@ 200 µg/mL in methanol

**XY-0130-1** 1 x 1 mL**Aroclors Mixture**

3 Analytes

Aroclor 1221  
Aroclor 1242  
Aroclor 1254

@ 20 µg/mL in methanol

**XY-0128-1** 1 x 1 mL

@ 200 µg/mL in hexane

**US-227-1** 1 x 1 mL

@ 200 µg/mL in methanol

**XY-0131-1** 1 x 1 mL**Organochlorine Pesticides Mixture**

16 Analytes

aldrin  
alpha-BHC  
beta-BHC  
delta-BHC  
gamma-BHC  
4,4'-DDD  
4,4'-DDE  
4,4'-DDT  
dieldrin  
endosulfan I  
endosulfan II  
endosulfan sulfate  
endrin  
endrin aldehyde  
heptachlor  
heptachlor epoxide (B)

@ 20 µg/mL in methanol

**PPM-608B-1** 1 x 1 mL**Semi-Volatiles Calibration Mixture**

54 Analytes

acenaphthene  
acenaphthylene  
anthracene  
benz[a]anthracene  
benzo[a]pyrene  
benzo[b]fluoranthene  
benzo[ghi]perylene  
benzo[k]fluoranthene  
bis(2-chloroethoxy)methane  
bis(2-chloroethyl) ether  
bis(2-chloroisopropyl) ether  
bis(2-ethylhexyl) phthalate  
4-bromophenyl phenyl ether  
butyl benzyl phthalate  
2-chloronaphthalene  
2-chlorophenol  
4-chlorophenyl phenyl ether  
4-chloro-3-methylphenol

@ 1000 µg/mL in methylene chloride/benzene (3:1)

**SVM-165-1** 1 x 1 mLchrysene  
dibenz[a,h]anthracene  
1,2-dichlorobenzene  
1,3-dichlorobenzene  
1,4-dichlorobenzene  
2,4-dichlorophenol  
2,4-dimethylphenol  
2,4-dinitrophenol  
2,4-dinitrotoluene  
2,6-dinitrotoluene  
4,6-dinitro-2-methylphenol  
diethyl phthalate  
dimethyl phthalate  
diphenylamine  
di-n-butylphthalate  
di-n-octyl phthalate  
fluoranthene  
fluorenehexachlorobenzene  
hexachlorocyclopentadiene  
hexachloroethane  
hexachloro-1,3-butadiene  
indeno[1,2,3-cd]pyrene  
isophorone  
naphthalene  
nitrobenzene  
2-nitrophenol  
4-nitrophenol  
N-nitrosodimethylamine  
N-nitrosodi-n-propylamine  
pentachlorophenol  
phenanthrene  
phenol  
pyrene  
1,2,4-trichlorobenzene  
2,4,6-trichlorophenol



## EPA METHOD 625 ADDITIONAL CALIBRATION STANDARDS

(continued)

## Semi-Volatiles Calibration Mixture

## 55 Analytes

acenaphthene	4-chlorophenyl phenyl ether	hexachlorocyclopentadiene
acenaphthylene	chrysene	hexachloroethane
anthracene	dibenz[a,h]anthracene	indeno[1,2,3-cd]pyrene
azobenzene	1,2-dichlorobenzene	isophorone
benz[a]anthracene	1,3-dichlorobenzene	2-methyl-4,6-dinitrophenol
benzo[a]pyrene	1,4-dichlorobenzene	naphthalene
benzo[b]fluoranthene	2,4-dichlorophenol	nitrobenzene
benzo[ghi]perylene	2,4-dimethylphenol	2-nitrophenol
benzo[k]fluoranthene	2,4-dinitrophenol	4-nitrophenol
bis(2-chloroethoxy)methane	2,4-dinitrotoluene	N-nitrosodimethylamine
bis(2-chloroethyl) ether	2,6-dinitrotoluene	N-nitrosodi-n-propylamine
bis(2-chloroisopropyl) ether	diethyl phthalate	pentachlorophenol
bis(2-ethylhexyl) phthalate	dimethyl phthalate	phenanthrene
4-bromophenyl phenyl ether	di-n-butyl phthalate	phenol
butyl benzyl phthalate	di-n-octyl phthalate	pyrene
carbazole	fluoranthene	2,4,6-trichlorophenol
4-chloro-3-methylphenol	fluorene	1,2,4-trichlorobenzene
2-chloronaphthalene	hexachlorobenzene	
2-chlorophenol	hexachlorobutadiene	

@ 1000 µg/mL in methylene chloride/benzene (3:1)

**SVM-170-1** 1 x 1 mL

## Base/Neutral Analytes &amp; Benzidine Mixture

## 46 Analytes

acenaphthene	2-chloronaphthalene	hexachlorobenzene
acenaphthylene	4-chlorophenyl phenyl ether	hexachlorobutadiene
anthracene	chrysene	hexachlorocyclopentadiene
azobenzene	dibenz[a,h]anthracene	hexachloroethane
benz[a]anthracene	1,2-dichlorobenzene	indeno[1,2,3-cd]pyrene
benzidine	1,3-dichlorobenzene	isophorone
benzo[a]pyrene	1,4-dichlorobenzene	naphthalene
benzo[b]fluoranthene	3,3-dichlorobenzidine	nitrobenzene
benzo[ghi]perylene	diethyl phthalate	N-nitrosodimethylamine
benzo[k]fluoranthene	dimethyl phthalate	N-nitrosodiphenylamine
bis(2-chloroethyl) ether	2,4-dinitrotoluene	N-nitrosodi-n-propylamine
bis(2-chloroisopropyl) ether	2,6-dinitrotoluene	phenanthrene
bis(2-chloroethoxy)methane	di-n-butyl phthalate	pyrene
bis(2-ethylhexyl) phthalate	di-n-octyl phthalate	1,2,4-trichlorobenzene
4-bromophenyl phenyl ether	fluoranthene	
butyl benzyl phthalate	fluorene	

@ 100 µg/mL in methylene chloride

**US-435-1** 1 x 1 mL

@ 500 µg/mL in methylene chloride

**US-436-1** 1 x 1 mL

@ 2000 µg/mL in methylene chloride/benzene/acetonitrile (2:2:1)

**US-450-1** 1 x 1 mL

## EPA METHOD 625 ADDITIONAL CALIBRATION STANDARDS

(continued)

## Base/Neutral Mixture

30 Analytes

azobenzene	1,2-dichlorobenzene	hexachlorobutadiene
bis(2-chloroethyl) ether	1,3-dichlorobenzene	hexachlorocyclopentadiene
bis(2-chloroisopropyl) ether	1,4-dichlorobenzene	hexachloroethane
bis(2-ethylhexyl) phthalate	di-n-butyl phthalate	isophorone
bis(2-chloroethoxy)methane	di-n-octyl phthalate	nitrobenzene
4-bromophenyl phenyl ether	diethyl phthalate	N-nitrosodimethylamine
butyl benzyl phthalate	dimethyl phthalate	N-nitrosodi-n-propylamine
carbazole	2,4-dinitrotoluene	N-nitrosodiphenylamine
2-chloronaphthalene	2,6-dinitrotoluene	pyridine
4-chlorophenyl phenyl ether	hexachlorobenzene	1,2,4-trichlorobenzene

@ 2000 µg/mL in methylene chloride

**US-440-1** 1 x 1 mL

## Method 625 Modification Mixture

17 Analytes

acetophenone	o-cresol	n-hexadecane
alpha-terpineol	2,3-dichloroaniline	1-methylphenanthrene
aniline	n-decane	n-octadecane
benzoic acid	n-docosane	pyridine
carbazole	n-dodecane	n-tetradecane
p-cresol	n-eicosane	

@ 2000 µg/mL in methylene chloride

**US-445-1** 1 x 1 mL

## Organochlorine Pesticides Mixture

18 Analytes

aldrin
alpha-BHC
beta-BHC
delta-BHC
4,4'-DDD
4,4'-DDE
4,4'-DDT
dieldrin
endosulfan I
endosulfan II
endosulfan sulfate
endrin
endrin aldehyde
endrin ketone
gamma-BHC
heptachlor
heptachlor epoxide - isomer B
methoxychlor

@ 2000 µg/mL in benzene

**MISA-221-1** 1 x 1 mL

## Base/Neutrals Mixture

13 Analytes

2-chloronaphthalene	hexachlorobenzene
1,2-dichlorobenzene	hexachlorobutadiene
1,3-dichlorobenzene	hexachlorocyclopentadiene
1,4-dichlorobenzene	hexachloroethane
2,4-dinitrotoluene	isophorone
2,6-dinitrotoluene	nitrobenzene
	1,2,4-trichlorobenzene

@ 2000 µg/mL in methylene chloride

**US-295-1** 1 x 1 mL

## EPA METHOD 625 ADDITIONAL CALIBRATION STANDARDS

(continued)

## PAH Mixture

## 16 Analytes

acenaphthene  
 acenaphthylene  
 anthracene  
 benz[a]anthracene  
 benzo[a]pyrene  
 benzo[b]fluoranthene  
 benzo[ghi]perylene

benzo[k]fluoranthene  
 chrysene  
 dibenz[a,h]anthracene  
 fluoranthene  
 fluorene  
 indeno[1,2,3-cd]pyrene  
 naphthalene  
 phenanthrene  
 pyrene

@ 5000 µg/mL in methylene chloride/benzene (1:1)

**US-420-1** 1 x 1 mL

@ 2000 µg/mL in methylene chloride/benzene (1:1)

**US-106N-1** 1 x 1 mL

## EPA Method 625 Acid Mixture

## 11 Analytes

2-chlorophenol	500 µg/mL
4-chloro-3-methylphenol	2500 µg/mL
2,4-dichlorophenol	500 µg/mL
2,4-dimethylphenol	500 µg/mL
2,4-dinitrophenol	1500 µg/mL
2-methyl-4,6-dinitrophenol	2500 µg/mL
2-nitrophenol	500 µg/mL
4-nitrophenol	2500 µg/mL
pentachlorophenol	2500 µg/mL
phenol	500 µg/mL
2,4,6-trichlorophenol	1500 µg/mL

in methanol

**XY-0108-1** 1 x 1 mL

## CLP Base/Neutrals Mixture #1

## 13 Analytes

4-bromophenyl phenyl ether  
 4-chlorophenyl phenyl ether  
 bis(2-chloroethoxy)methane  
 bis(2-chloroethyl) ether  
 bis(2-chloroisopropyl) ether  
 bis(2-ethylhexyl) phthalate  
 butyl benzyl phthalate  
 diethyl phthalate  
 dimethyl phthalate  
 di-n-butyl phthalate  
 di-n-octyl phthalate  
 N-nitrosodi-n-propylamine  
 N-nitrosodiphenylamine

@ 2000 µg/mL in methylene chloride

**US-130-1** 1 x 1 mL

## Toxic Substances Mixture

## 7 Analytes

benzyl alcohol  
 4-chloroaniline  
 dibenzofuran  
 2-methylnaphthalene  
 2-nitroaniline  
 3-nitroaniline  
 4-nitroaniline

@ 2000 µg/mL in methylene chloride

**US-415-1** 1 x 1 mL

## Volume discounts for individual solutions

Order 4–19 ampules of the same item and receive a **20% DISCOUNT**  
 Order 20 or more ampules of the same item and receive a **30% DISCOUNT**



## EPA METHOD 625 ADDITIONAL CALIBRATION STANDARDS

(continued)

## Internal and Surrogate Standards for Method 625

## 1 x 1 mL Ampules

All @ 1000 µg/mL in acetone

4,4-dibromobiphenyl IST-134-1

All @ 200 µg/mL in methanol

1-fluoronaphthalene IST-182-1

All @ 1000 µg/mL in methanol

1-fluoronaphthalene IST-181-1

decafluorobiphenyl IST-153-1

2,2-difluorobiphenyl IST-161-1

2-fluoronaphthalene IST-191-1

2-fluorophenol IST-251-1

4-fluoroaniline IST-171-1

naphthalene-d<sub>8</sub> IST-201-1nitrobenzene-d<sub>5</sub> IST-211-1

pentafluorophenol IST-263-1

pyridine-d<sub>5</sub> IST-241-1

All @ 2000 µg/mL in methanol

pentafluorophenol IST-261-1

All @ 2500 µg/mL in methanol

decafluorotriphenylphosphine (DFTPP) IST-344-1

@ 25 µg/mL in methylene chloride

decafluorotriphenylphosphine (DFTPP) IST-342-1

@ 200 µg/mL in methylene chloride

aniline-d<sub>5</sub> IST-101-1anthracene-d<sub>10</sub> IST-111-1benz[a]anthracene-d<sub>12</sub> IST-121-1

4,4'-dibromooctafluorobiphenyl IST-141-1

4,4-dibromobiphenyl IST-133-1

2,2-difluorobiphenyl IST-162-1

2-fluoronaphthalene IST-192-1

2-fluorophenol IST-252-1

4-fluoroaniline IST-172-1

naphthalene-d<sub>8</sub> IST-202-1nitrobenzene-d<sub>5</sub> IST-212-1

pentafluorophenol IST-262-1

phenanthrene-d<sub>10</sub> IST-231-1phenol-d<sub>5</sub> IST-272-1

@ 250 µg/mL in methylene chloride

decafluorotriphenylphosphine (DFTPP) IST-340-1

All @ 1000 µg/mL in methylene chloride

aniline-d<sub>5</sub> IST-100-1anthracene-d<sub>10</sub> IST-110-1benz[a]anthracene-d<sub>12</sub> IST-120-1

4,4-dibromobiphenyl IST-130-1

4,4-dibromooctafluorobiphenyl IST-140-1

decafluorobiphenyl IST-150-1

2,2-difluorobiphenyl IST-160-1

4-fluoroaniline IST-170-1

1-fluoronaphthalene IST-180-1

2-fluoronaphthalene IST-190-1

naphthalene-d<sub>8</sub> IST-200-1nitrobenzene-d<sub>5</sub> IST-210-1

2,3,4,5,6-pentafluorobiphenyl IST-220-1

phenanthrene-d<sub>10</sub> IST-230-1

2-fluorophenol IST-250-1

pentafluorophenol IST-260-1

phenol-d<sub>5</sub> IST-270-1

@ 2500 µg/mL in methylene chloride

decafluorotriphenylphosphine (DFTPP) IST-343-1

@ 1000 µg/mL in methyl tert-butyl ether

4,4-dibromooctafluorobiphenyl PPS-175-1

decafluorobiphenyl IST-154-1

## EPA METHOD 632

### CARBAMATE AND UREA PESTICIDES

Method 632 is used to measure carbamate and urea pesticides. Samples are extracted, then quantitated using HPLC.

To read the complete method, log onto our website at [www.ultrasci.com](http://www.ultrasci.com).

#### Carbamate and Urea Pesticides Mixture

##### 19 Analytes

aminocarb	methomyl
barban	mexacarbate
carbaryl	monuron
carbofuran	neburon
chlorpropham	oxamyl
diuron	propham
fenuron	propoxur
fluometuron	siduron
linuron	swep
methiocarb	

@ 100 µg/mL in methanol

**PPM-632A-1** 1 x 1 mL

## EPA METHOD 632.1

### CARBAMATE AND AMIDE PESTICIDES

Method 632.1 is used to measure carbamate and amide pesticides. Samples are extracted, then quantitated using HPLC.

To read the complete method, log onto our website at [www.ultrasci.com](http://www.ultrasci.com).

#### Carbamate and Amide Pesticides Mixture

##### 2 Analytes

napropamide  
propanil

@ 100 µg/mL in acetonitrile/acetone (9:1)

**PPM-632B-1** 1 x 1 mL



Find additional EPA Method 600 Series Standards online:

[www.ultrasci.com/EPA600](http://www.ultrasci.com/EPA600)

## EPA METHOD 633

### ORGANONITROGEN PESTICIDES

Method 633 is used to measure organonitrogen pesticides. Samples are extracted, then quantitated using a GC/NPD.

To read the complete method, log onto our website at [www.ultrasci.com](http://www.ultrasci.com).

#### Organonitrogen Pesticides Mixture

##### 7 Analytes

bromacil  
deet  
hexazinone  
metribuzin  
terbacil  
triadimefon  
tricyclazole

@ 100 µg/mL in acetone

**NPM-633-1** 1 x 1 mL

## EPA NON-CONVENTIONAL PESTICIDES METHOD STANDARDS

(continued)

EPA Method	Compound	Concentration	Catalog #	Unit Size
629	cyanazine	@ 1000 µg/mL in methanol	EPA-1165-1	1 x 1 mL
630 & 630.1	carbon disulfide	@ 5000 µg/mL in methanol	EPA-1012-1	1 x 1 mL
	ziram	neat material	PST-1750-1	1 x 100 mg
631	carbendazim	@ 100 µg/mL in methanol	PST-1285M100A01	1 x 1 mL
	rotenone	@ 1000 µg/mL in methanol	EPA-1168-1	1 x 1 mL
636	bensulide	@ 1000 µg/mL in methanol	EPA-1169-1	1 x 1 mL
638	oryzalin	@ 1000 µg/mL in acetonitrile	EPA-1170-1	1 x 1 mL
639	bendiocarb	@ 1000 µg/mL in methanol	EPA-1171-1	1 x 1 mL
641	thiabendazole	@ 1000 µg/mL in methanol	EPA-1173-1	1 x 1 mL
643	bentazon	@ 1000 µg/mL in methanol	EPA-1174-1	1 x 1 mL
644	picloram	@ 1000 µg/mL in methanol	EPA-1175-1	1 x 1 mL

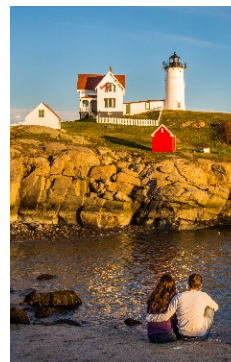
## WWW.ULTRASCI.COM

### Download and Print from Our Online Library

The ULTRA Scientific website allows you to easily obtain up-to-date documents that are related not only to our business, but to the industry in general.

#### Choose from:

- ✓ ULTRA Scientific catalog
- ✓ ULTRA Scientific brochures
- ✓ SDS's (GHS compliant)
- ✓ EPA Methods
- ✓ And more!



## ORDERING IS EASY

#### Online

www.ultrasci.com  
ultra@ultrasci.com

#### Phone

800-338-1754  
Monday – Friday  
8:30 a.m. - 5:00 p.m. ET

#### Fax

401-295-2330

#### Mail

ULTRA Scientific  
250 Smith Street  
No. Kingstown, RI  
02852



## EPA METHOD 680

## PCBs by GC/MS

## PCBs

Method 680 is used to measure PCBs and select pesticides in water, oil, or sediment. Samples are extracted, then quantitated using GC/MS.

To read the complete method, log onto our website at [www.ultrasci.com](http://www.ultrasci.com).

## EPA Method 680 Kit

## Kit - contains four ampules:

1 x 1 mL of each of the following solutions

Concentration Mixture	(CB-681MN-1)
Retention Time Mixture	(CB-682MN-1)
Chrysene-d12 Solution	(ATS-120-1)
Phenanthrene-d10 Solution	(IST-230-1)

**CBK-680A** **Kit**

## Internal and Surrogate Standards

chrysene-d12

@ 2000 µg/mL in Methylene Chloride

**ATS-120-1** **1 x 1 mL**

250 µg/mL in toluene

**ATS-122-1** **1 x 1 mL**

phenanthrene-d10

@ 1000 µg/mL in Methylene Chloride

**IST-230-1** **1 x 1 mL**

## Internal Standard Mixture

2 Analytes

chrysene-d12  
phenanthrene-d10

@ 40 µg/mL in hexane

**ISM-565-1** **1 x 1 mL**

@ 75 µg/mL in hexane/toluene (1:1)

**ISM-566-1** **1 x 1 mL**

@ 750 µg/mL in hexane/methylene chloride

**ISM-567-1** **1 x 1 mL**

## Concentration Calibration Standard Mixture

9 Analytes

2-chlorobiphenyl (BZ # 1)	100 µg/mL
2,3-dichlorobiphenyl (BZ # 5)	100 µg/mL
2,4,5-trichlorobiphenyl (BZ # 29)	100 µg/mL
2,2',4,6-tetrachlorobiphenyl (BZ # 50)	200 µg/mL
2,2',3,4,5'-pentachlorobiphenyl (BZ # 87)	200 µg/mL
2,2',4,4',5,6'-hexachlorobiphenyl (BZ # 154)	200 µg/mL
2,2',3,4',5,6,6'-heptachlorobiphenyl (BZ # 188)	300 µg/mL
2,2',3,3',4,5',6,6'-octachlorobiphenyl (BZ # 200)	300 µg/mL
decachlorobiphenyl (BZ # 209)	500 µg/mL

in hexane/toluene (1:1)

**CB-680-1** **1 x 1 mL**

## Concentration Calibration Standard Mixture

9 Analytes

Congener	µg/mL
2-chlorobiphenyl	50
2,3-dichlorobiphenyl	50
2,4,5-trichlorobiphenyl	50
2,2',4,6-tetrachlorobiphenyl	100
2,2',3,4,5'-pentachlorobiphenyl	100
2,2',4,4',5,6'-hexachlorobiphenyl	100
2,2',3,4',5,6,6'-heptachlorobiphenyl	150
2,2',3,3',4,5',6,6'-octachlorobiphenyl	150
decachlorobiphenyl	250

in Hexane

**CB-681MN-1** **1 x 1 mL**

## Concentration Calibration Standard Mixture

9 Analytes

2-chlorobiphenyl (BZ # 1)
2,3-dichlorobiphenyl (BZ # 5)
2,4,5-trichlorobiphenyl (BZ # 29)
2,2',4,6-tetrachlorobiphenyl (BZ # 50)
2,2',3,4,5'-pentachlorobiphenyl (BZ # 87)
2,2',4,4',5,6'-hexachlorobiphenyl (BZ # 154)
2,2',3,4',5,6,6'-heptachlorobiphenyl (BZ # 188)
2,2',3,3',4,5',6,6'-octachlorobiphenyl (BZ # 200)
decachlorobiphenyl (BZ # 209)

@ 500 µg/mL in hexane/toluene (1:1)

**CB-684-1** **1 x 1 mL**

## Retention Time Calibration Standard Mixture

3 Analytes

Congener	µg/mL
3,3',4,4'-tetrachlorobiphenyl	100
2,2',4,6,6'-pentachlorobiphenyl	100
2,2',3,3',4,5,5',6,6'-nonachlorobiphenyl	200

in Hexane

**CB-682MN-1** **1 x 1 mL**

## Retention Time Calibration Standard Mixture

4 Analytes

3,3',4,4'-tetrachlorobiphenyl (BZ # 77)
2,2',4,6,6'-pentachlorobiphenyl (BZ # 104)
2,3,3',4,4',5,5'-heptachlorobiphenyl (BZ # 189)
2,2',3,3',5,5',6,6'-octachlorobiphenyl (BZ # 202)

@ 2.5 µg/mL in hexane

**CB-685-1** **1 x 1 mL**