

## New EPA 1600 Series Methods

### Method 1613 Dioxins, Furans Nonylphenol & Ethoxylates

**All Products Produced & Tested under ISO 9001:2000 and ISO 17025 Quality System**

#### Method 1613 Dioxins & Furans by HRGC/HRMS

Native Solutions of the USEPA Method 1613 analytes. These mixes can also be used for USEPA Method 23, 8280, 8290. They also cover EU Method EN-1948 and Japanese Methods JIS-K0311 and JIS-K0312.

AccuStandard has developed a complete line of Native Standards to meet EPA Method 1613. Standards included in this line include Tetra- through Octa-Chlorinated Dioxins and Furans by Isotope Dilution HRGC/MS. Laboratories utilizing AccuStandards Chemical Reference Standards for Method 1613 will meet the requirements for the EPA's data collection and monitoring programs that are associated with the Clean Water Act, the Resource Conservation and Recovery Act, and the Safe Drinking Water Act.

#### All units in ng/mL in Nonane

	17 comps.				
M-1613-CAL	-01	-02	-03	<b>-04</b>	-05
2,3,7,8-Tetrachlorodibenzo-p-dioxin	0.5	2	10	<b>40</b>	200
2,3,7,8-Tetrachlorodibenzofuran	0.5	2	10	<b>40</b>	200
1,2,3,7,8-Pentachlorodibenzo-p-dioxin	2.5	10	50	<b>200</b>	1000
1,2,3,7,8-Pentachlorodibenzofuran	2.5	10	50	<b>200</b>	1000
2,3,4,7,8-Pentachlorodibenzofuran	2.5	10	50	<b>200</b>	1000
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin	2.5	10	50	<b>200</b>	1000
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin	2.5	10	50	<b>200</b>	1000
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	2.5	10	50	<b>200</b>	1000
1,2,3,4,7,8-Hexachlorodibenzofuran	2.5	10	50	<b>200</b>	1000
1,2,3,6,7,8-Hexachlorodibenzofuran	2.5	10	50	<b>200</b>	1000
1,2,3,7,8,9-Hexachlorodibenzofuran	2.5	10	50	<b>200</b>	1000
2,3,4,6,7,8-Hexachlorodibenzofuran	2.5	10	50	<b>200</b>	1000
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	2.5	10	50	<b>200</b>	1000
1,2,3,4,6,7,8-Heptachlorodibenzofuran	2.5	10	50	<b>200</b>	1000
1,2,3,4,7,8,9-Heptachlorodibenzofuran	2.5	10	50	<b>200</b>	1000
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin	5	20	100	<b>400</b>	2000
1,2,3,4,6,7,8,9-Octachlorodibenzofuran	5	20	100	<b>400</b>	2000

**Calibration Set****M-1613-CAL-SET** (-01,-02,-03,-04,-05)

All in ng/mL in Nonane

5 x 1 mL

17 comps.

**Precision and Recovery Standard****M-1613-PAR**

Bold (-04)

1 x 1 mL

**M-1613-PAR-PAK**All units in ng/mL  
in Nonane

5 x 1 mL

17 comps.

**2,3,7,8 Isomers only Mix**

This solution is for those labs only determining the concentration of the two most toxic isomers.

**M-1613-DF**

40 ng/mL in each in Nonane

1 x 1 mL

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

2,3,7,8-Tetrachlorodibenzofuran

**Nonylphenol, Bisphenol, p-tert-Octylphenol, Nonylphenol monoethoxylate & Nonophenol Diethoxylate**

Nonylphenol ethoxylates and alkylphenol ethoxylates have been produced in large quantities in the U.S and around the world. They are used in many different applications: oil-soluble detergents, emulsifiers, wetting agents, lubricants, and antistatic agents. Breakdown products have been shown to be possible endocrine disruptor.

In January of 2004, the US EPA proposed ambient water quality criteria for nonylphenol. The EPA is working with ASTM to develop and validate a method for nonylphenol and alkylphenol ethoxylates.

**Nonylphenol Calibration Standard Solution****M-1626**At stated conc. in CH<sub>2</sub>Cl<sub>2</sub>

1 x 1 mL

7 comps.

**Nonylphenol Target Component Spike Standard****M-1626-S**

At stated conc. in MeOH

1 x 1 mL

5 comps.

Nonylphenol

(160 µg/mL)

Nonylphenol

(160 µg/mL)

Nonylphenol monoethoxylate

(320 µg/mL)

Nonylphenol  
monoethoxylate

(320 µg/mL)

Nonylphenol diethoxylate

(640 µg/mL)

Nonylphenol diethoxylate

(640 µg/mL)

4-tert-Octylphenol

(32 µg/mL)

4-tert-Octylphenol

(32 µg/mL)

Bisphenol A

(32 µg/mL)

Bisphenol A

(32 µg/mL)

4-nonylphenol

(32 µg/mL)

4-nonylphenol monoethoxylate

(32 µg/mL)

**Nonylphenol Internal Standard**M-1626-IS

1 x 1 mL

2000 µg/mL each in CH<sub>2</sub>Cl<sub>2</sub> 2 comps.

Acenaphthene-d10

Phenanthrene-d10

**Nonylphenol Surrogate Component Spike Standard**M-1626-SS

1 x 1 mL

32 µg/mL each in MeOH

2 comps.

4-nonylphenol

4-nonylphenol monoethoxylate