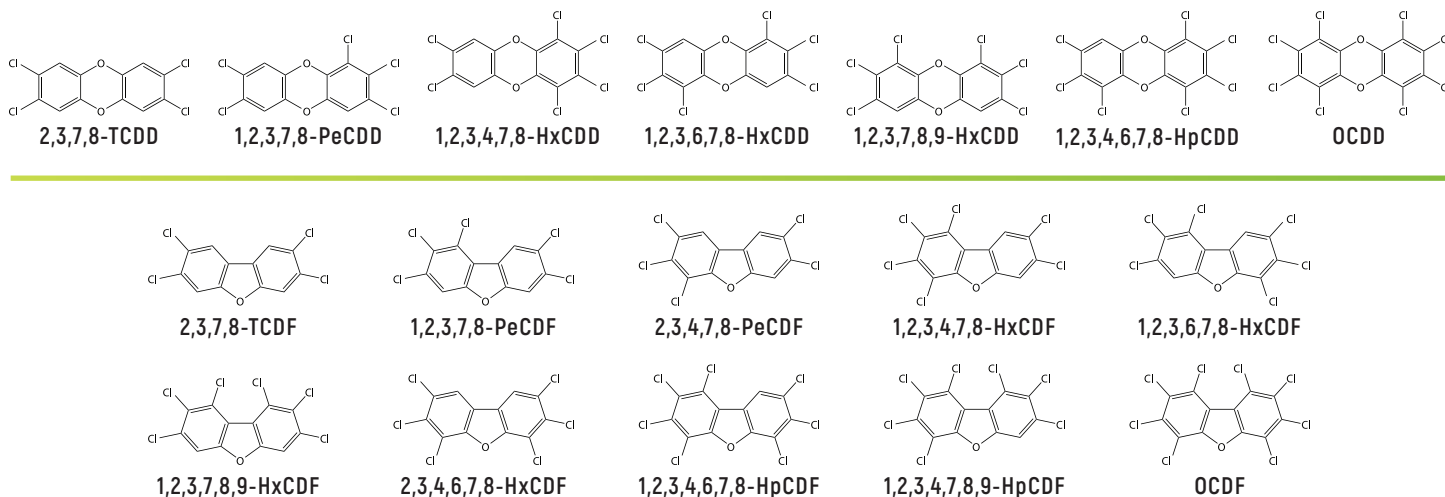


SERVICES SUMMARY 1613B

Testing for Polychlorinated Dibenzo-p-Dioxins and Dibenzofurans by High Resolution GC/MS: EPA Method 1613B



METHOD	CONGENERS	DESCRIPTION	MATRIX	RL/PQL ¹	TAT ²	CONTAINER	PRESERVATION*	HOLD TIMES ³	MIN VOLUME
1613B	2,3,7,8 TCDD Only	2,3,7,8 Tetrachlorodibenzo-p-dioxin only Drinking Water	DW	5 pg/L	5 Days	Two 1-Liter (AG)	Refrigerate <6° C Sodium Thiosulfate	Up to 1 year ²	1 L
1613B	2,3,7,8 TCDD Only	2,3,7,8 Tetrachlorodibenzo-p-dioxin only All matrices	Water	10 pg/L	10 Days	Two 1-Liter (AG)	Refrigerate <6° C	Up to 1 year	1 L
			Solid	1.0 ng/Kg		One 4-8 oz (AG)	Unpreserved		25 g
			Tissues	1.0 ng/Kg		Aluminum Foil	Freeze		25 g
1613B	PCDDs/PCDFs (Tetra - Octa)	Polychlorinated dibenzo-p-Dioxins / Polychlorinated dibenzofurans 17 Dioxin/Furan congeners and Totals All Matrices	Water	10-100 pg/L	10 Days	Two 1-Liter (AG)	Refrigerate <6° C	Up to 1 year	1 L
			Solid	1-10 ng/Kg		One 4-8 oz (AG)	Unpreserved		25 g
			Tissues	1-10 ng/Kg		Aluminum Foil	Freeze		25 g
			Notes						
¹ RLs/PQLs subject to change, please contact lab for current limits. ² Standard TAT is measured by business days – rush/customized TAT may be available by prearrangement.			³ Some State or Federal agencies may have alternative hold times and those must be met. *All methods require samples to remain in darkness or out of direct contact with sunlight.						

Method Overview

Method 1613B provides for the detection and quantitative measurement of (7) polychlorinated dibenzo-p-dioxins and (10) polychlorinated dibenzofurans (tetra through octa) in a variety of environmental matrices including: solid, aqueous, ash, sludge and biota. The analysis calls for the use of Gas Chromatography/High-Resolution Mass Spectrometry (GC/HRMS) on purified sample extracts and provides an option for reporting the analytical results in terms of the toxic equivalency factors.

Method Detection Limits

Actual detection limits achieved by method 1613B will vary according to the sample matrix and by homologue group but to be valid, must meet the requirements of the method. In order to achieve lower detection limits, sample extracts must undergo an extensive cleanup process prior to analysis in order to remove interferences. For a complete list of reportable analytes and current limits, please contact Pace Analytical®

Method QAQC:

- Labeled internal standard recoveries are continuously monitored to ensure data quality and method compliance.
- Lab Blanks – 1 per 20 samples.

Certifications:

Department of Defense (DoD) · NELAC
Multiple States · ISO/IEC 17025: 2017

Instrumentation:

3 – GC/HRMS – Autospec Ultima
High Resolution Mass Spectrometers
3 – GC/HRMS – Autospec Premier High
Resolution Mass Spectrometers

Sample Matrices:

Drinking Water · Waste Water · Soil/Sediment
Hazardous Waste · Food/Animal Feed
Nutraceutical Products · Industrial Products
Agricultural Products · Biological Tissue

