ThermoFisher SCIENTIFIC

QA.372
Rev.3
5/14/2024

Lot Number: 7231 **Item Number:** N311-0250BPC **Description: 250mL WM HDPE**

Applicable Group: 1 & 2

This is your Certificate for Thermo Fisher Scientific Certified Environmental Sample Containers which has been prepared in accordance with Thermo Fisher Scientific Performance-Based Specifications. This product meets or exceeds analyte specifications established in the U.S. EPA "Specification and Guidance for Contaminant-Free Sample Containers" for use in Superfund and other hazardous waste programs. Representative containers have been tested at periodic intervals in house and/or by certified third-party laboratories in accordance with our quality procedures. In cases where the Method Detection Limit exceeds the Quantitation Limit, and no detectable results were obtained, the analyte is designated as "PASS".

Group 1. Metals, Cyanide, and Fluoride

Analyte	Quantitation Limit (µg/L)	Analyte	Quantitation Limit (µg/L)	Analyte	Quantitation Limit (µg/L)	Analyte	Quantitation Limit (µg/L)
Aluminum	<100	Chromium	<10	Mercury	<0.2	Vanadium	<10
Antimony	<5	Cobalt	<10	Nickel	<20	Zinc	<20
Arsenic	<2	Copper	<10	Potassium	<750	Cyanide	<10
Barium	<20	Iron	<500	Selenium	<3	Fluoride	<200
Beryllium	<1	Lead	<2	Silver	<10	Nitrate/Nitrite	<100
Cadmium	<1	Magnesium	<500	Sodium	<500		
Calcium	<500	Manganese	<10	Thallium	<10		

Group 2. Other Water Quality Parameters

Analyte	Quantitation Limit (µg/L)	Analyte	Quantitation Limit (µg/L)	Analyte	Quantitation Limit (µg/L)
Chloride	<100	Paraquat (amber)	<0.4	Sulfate	<100
		Diquat (amber)	<1	Sulfide	<30
				Sulfite	<1000

Group 3. Semi-Volatiles, Pesticides, PCBs

Analyte	Quantitation Limit (µg/L)	Analyte	Quantitation Limit (µg/L)	Analyte	Quantitation Limit (µg/L)
Phenol	<5	2,4-Dinitrophenol	<20	alpha-BHC	<0.01
bis-(2-Chloroethyl)ether	<5	4-Nitrophenol	<20	beta-BHC	<0.01
2-Chlorophenol	<5	Dibenzofuran	<5	delta-BHC	<0.01
2-Methylphenol	<5	2,4-Dinitrotoluene	<5	gamma-BHC (Lindane)	<0.01
2,2'-oxybis-(1-Chloropropane)	<5	Diethylphthalate	<5	Heptachlor	<0.01
4-Methylphenol	<5	4-Chlorophenyl-phenylether	<5	Aldrin	<0.01
N-Nitroso-di-n-dipropylamine	<5	Fluorene	<5	Heptachlor epoxide	<0.01
Hexachloroethane	<5	4-Nitroaniline	<20	Endosulfan 1	<0.01
Nitrobenzene	<5	4,6-Dinitro-2-methylphenol	<20	Dieldrin	<0.02
Isophorone	<5	N-Nitrosodiphenylamine	<5	4,4'-DDE	<0.02
2-Nitrophenol	<5	4-Bromophenyl-phenylether	<5	Endrin	<0.02
2,4-Dimethylphenol	<5	Hexachlorobenzene	<5	Endosulfan II	<0.02
bis-(2-Chloroethoxy)methane	<5	Pentachlorophenol	<20	4,4'-DDD	<0.02
2,4-Dichlorophenol	<5	Phenanthrene	<5	Endosulfan sulfate	<0.02
1,2,4-Trichlorobenzene	<5	Anthracene	<5	4,4'-DDT	<0.02
Naphthalene	<5	Di-n-butylphthalate	<5	Methoxychlor	<0.10
4-Chloroaniline	<5	Fluoranthene	<5	Endrin ketone	<0.02
Hexachlorobutadiene	<5	Pyrene	<5	Endrin aldehyde	<0.02
4-Chloro-3-methylphenol	<5	Butylbenzylphthalate	<5	alpha-Chlordane	<0.01
2-Methylnaphthalene	<5	3,3'-Dichlorobenzidine	<5	gamma-Chlordane	<0.01
Hexachlorocyclopentadiene	<5	Benz[a]anthracene	<5	Toxaphene	<1.0
2,4,6-Trichlorophenol	<5	Chyrsene	<5	Aroclor-1016	<0.20
2,4,5-Trichlorophenol	<20	Bis-(2-Ethylhexyl)phthalate	<5	Aroclor-1221	<0.20
2-Chloronaphthalene	<5	Di-n-octylphthalate	<5	Aroclor-1232	<0.40
2-Nitroaniline	<20	Benzo[b]flutoanthene	<5	Aroclor-1242	<0.20
Dimethylphthalate	<5	Benzo[k]fluoranthene	<5	Aroclor-1248	<0.20
Acenaphthylene	<5	Benzo[a]pyrene	<5	Aroclor-1254	<0.20
2,6-Dinitrotoluene	<5	Indeno(1,2,3-cd)pyrene	<5	Aroclor-1260	<0.20
3-Nitroaniline	<20	Dibenz[a,h]anthracene	<5		
Acenaphthene	<5	Benzo[g,h,i]perylene	<5		

GROUP 4 ON NEXT PAGE

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Group 4. Volatile Organics

Analyte	Quantitation Limit (µg/L)	Analyte	Quantitation Limit (µg/L)	Analyte	Quantitation Limit (µg/L)
Chloromethane	<0.50	Bromochloromethane	<0.50	Tetrachloroethene	<0.50
Bromomethane	<0.50	1,1,1-Trichloroethane	<0.50	1,1,2,2,-Tetrachloroethane	<0.50
Vinyl Chloride	<0.50	Carbon Tetrachloride	<0.50	1,2-Dibromoethane	<0.50
Chloroethane	<0.50	Bromodichloromethane	<0.50	Toluene	<0.50
Methylene Chloride	<1.0	1,2-Dichloropropane	<0.50	Chlorobenzene	<0.50
Acetone	<2.50	cis-1,3-Dichloropropene	<0.50	Ethylbenzene	<0.50
Carbon Disulfide	<0.50	Trichloroethene	<0.50	Styrene	<0.50
1,1-Dichloroethene	<0.50	Dibromochloromethane	<0.50	Xylenes (total)	<0.50
1,1-Dichloroethane	<0.50	1,1,2-Trichloroethane	<0.50	1,3-Dichlorobenzene	<0.50
cis-1,2-Dichloroethene	<0.50	Benzene	<0.50	1,4-Dichlorobenzene	<0.50
trans-1,2-Dichloroethene	<0.50	trans-1,3-Dichloropropene	<0.50	1,2-Dichlorobenzene	<0.50
Chloroform	<0.50	Bromoform	<0.50	1,2-Dibromo-3-chloropropane	<0.50
1,2-Dichloroethane	<0.50	4-Methyl-2-pentanone	<2.50		
2-Butanone	<2.50	2-Hexanone	<2.50		

In addition to the above analytes in Group 4, 20mL, 40 mL, and 60 mL vials are certified for:

Analyte	Quantitation Limit (µg/L)
Total Organic Carbon	<600

Group 5. O&G, TPH, DRO

Analyte	Quantitation Limit
Oil & Grease	<5.0 mg/L
Total Petroleum Hydrocarbons	<50 mg/L
Diesel Range Organics	<0.2 mg/L

Approved By / Date: Levi Nott

Levi Nott 4/28/2025

Quality Assurance