Thermo SCIENTIFIC

PRODUCT CERTIFICATE

Item Description: 250mL Amber Boston Round

Production Number: 00076292 **Item Number: S349-0250** **Group 3 is applicable**

This is your Certificate for Thermo Scientific Certified Environmental Sample Containers product 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 by certified third-party laboratories in accordance with our quality procedures.

Group 1. Glass and HDPE Sample containers for use in the analysis of Metals

Analyte	Quantitation Limit (µg/L)	Analyte	Quantitation Limit (µg/L)	Analyte	Quantitation Limit (µg/L)	Analyte	Quantitation Limit (µg/L)
Aluminum	<80	Calcium (all HDPE)	<100	Magnesium	<100	Selenium	<2
Antimony	<5	Chromium	<10	Manganese	<10	Silver	<5
Arsenic	<2	Cobalt	<10	Mercury	<0.2	Sodium	<500
Barium	<20	Copper	<5	Nickel	<10	Sodium (all HDPE)	<100
Beryllium	<0.5	Iron	<50	Potassium	<750	Thallium	<5
Cadmium	<1	Lead	<2	Potassium (all HDPE)	<100	Vanadium	<10
Calcium	<500					Zinc	<10

Group 2. Glass Sample Containers for use in the analysis of Semivolatiles and Pesticides/PCBs

Analyte	Quantitation Limit (µg/L)	Analyte	Quantitation Limit (µg/L)	Analyte	Quantitation Limit (µg/L)
Acenaphthene	<5	Acenaphthylene	<5	Anthracene	<5
Benzo(a)anthracene	<5	Benzo(a)pyrene	<5	Benzo(b)fluoranthene	<5
Benzo(k)Fluoranthene	<5	Benzo(g,h,i)perylene	<5	Benzoic Acid	<20
Benzyl Alcohol	<5	4-Bromophenyl-phenylether	<5	Butylbenzylphthalate	<5
4-Chloroaniline	<5	4-Chloro-3-methylphenol	<5	bis-(2-Chloroethoxy)methane	<5
bis-(2-Chloroethyl)ether	<5	bis-(2-Chloroisopropyl)ether	<5	2-Chloronaphthalene	<5
2-Chlorophenol	<5	4-Chlorophenyl-phenylether	<5	Chrysene	<5
Di-n-butylphthalate	<5	Di-n-octylphthalate	<5	Dibenzo(a,h)anthracene	<5
Dibenzofuran	<5	1,2-Dichlorobenzene	<5	1,4-Dichlorobenzene	<5
1,3-Dichlorobenzene	<5	3,3'-Dichlorobenzidine	<5	2,4-Dichlorophenol	<5
Diethylphthalate	<5	Dimethylphthalate	<5	2,4-Dinitrotoluene	<5
4,6-Dinitro-2-methylphenol	<20	2,4-Dinitrophenol	<20	Fluoranthene	<5
2,6-Dinitrotoluene	<5	bis-(2-Ethylhexyl)phthalate	<5	Hexachlorobutadiene	<5
Fluorene	<5	Hexachlorobenzene	<5	Indeno(1,2,3-cd)pyrene	<5
Hexachlorocyclopentadiene	<5	Hexachloroethane	<5	2-Methylphenol	<5
Isophorone	<5	2-Methylnaphthalene	<5	3-Nitroaniline	<20
4-Methylphenol	<5	2-Nitroaniline	<20	N-Nitrosodimethylamine	<5
4-Nitroaniline	<20	N-Nitroso-di-n-propylamine	<5	Nitrobenzene	<5
N-Nitrosodiphenylamine	<5	Naphthalene	<5	Pentachlorophenol	<20
2-Nitrophenol	<5	4-Nitrophenol	<20	Pyrene	<5
Phenanthrene	<5	Phenol	<5	2,4,6-Trichlorophenol	<5
1,2,4-Trichlorobenzene	<5	2,4,5-Trichlorophenol	<20	Aldrin	<0.01
Azobenzene	<5	Carbazole	<5	Alpha-BHC	<0.01
4,4-DDD	<0.02	Endosulfan II	<0.02	Beta-BHC	<0.01
4,4-DDE	<0.02	Endosulfan Sulfate	<0.02	Delta-BHC	<0.01
4,4-DDT	<0.02	Endrin	<0.02	Gamma-BHC	<0.01
Dieldrin	<0.02	Endrin Aldehyde	<0.02	Heptachlor Epoxide	<0.01
Endosulfan I	<0.01	Heptachlor	<0.01	Alpha-Chlordane	<0.01
Methoxychlor	<0.10	Endrin Ketone	<0.02	Aroclor-1016	<0.20
Gamma-Chlordane	<0.01	Toxaphene	<0.30	Aroclor-1242	<0.20
Aroclor-1221	<0.20	Aroclor-1232	<0.20	Aroclor-1260	<0.20
Aroclor-1248	<0.20	Aroclor-1254	<0.20		
Aroclor-1262	<0.20	Aroclor-1268	<0.20		

Group 3. Glass Sample Containers for use in the analysis of Volatiles

Analyte	Quantitation Limit (µg/L)	Analyte	Quantitation Limit (µg/L)	Analyte	Quantitation Limit (µg/L)
Acetone	<5	1,3-Dichloropropane	<1	Benzene	<1
2,2-Dichloropropane	<1	Bromobenzene	<1	1,2-Dichloropropane	<1
Bromodichloromethane	<1	trans-1,3-Dichloropropene	<1	Bromoform	<1
cis-1,3-Dichloropropene	<1	Bromomethane	<1	1,1-Dichloropropene	<1
2-Butanone	<5	Ethylbenzene	<1	tert-Butylbenzene	<1
Hexachlorobutadiene	<1	sec-Butylbenzene	<1	2-Hexanone	<5
n-Butylbenzene	<1	Isopropylbenzene	<1	Carbon Disulfide	<1
p-Isopropyltoluene	<1	Carbon Tetrachloride	<1	4-Methyl-2-pentanone	<5
Chloromethane	<1	Methylene Chloride	<2	Chloroethane	<1
1,1,2,2-Tetrachloroethane	<1	Chloroform	<1	n-Propylbenzene	<1
Dibromochloromethane	<1	Styrene	<1	2 & 4 Chlorotoluene	<1
1,2,3-Trichloropropane	<1	1,2-Dibromo-3-chloropropane	<1	Tetrachloroethene	<1
1,4-Dichlorobenzene	<1	Toluene	<1	1,2-Dibromoethane (EDB)	<1
1,1,1-Trichloroethane	<1	Dibromomethane	<1	1,2,4-Trichlorobenzene	<1
Dichlorodifluoromethane	<1	1,1,2-Trichloroethane	<1	1,3-Dichlorobenzene	<1
1,2,3-Trichloropropane	<1	1,2-Dichlorobenzene	<1	Trichloroethene	<1
trans-1,2-Dichloroethene	<1	Trichlorofluoromethane	<1	1,2-Dichloroethene	<1
Vinyl Acetate	<5	1,1-Dichloroethane	<1	Bromochloromethane	<1
Xylenes (total)	<1	1,3,5-Trimethylbenzene	<1		
Vinyl Chloride	<1	1,1-Dichloroethene	<1		
		1,2,4-Trimethylbenzene	<1		
		cis-1,2-Dichloroethene	<1		

In addition to the above analytes in Group 3, 40 mL and 60 mL vials are certified for:

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

Please keep this certificate for your records and to facilitate any necessary correspondence. If additional information is required, contact our Technical Service Department at (800) 550-4964. Thermo Scientific Environmental Sample Containers are processed in our ISO 9001 manufacturing facilities in the US. All of our processes from design to development to manufacturing meet the requirements for quality as set forth by the International Standards Organization.

Robby Ryans QE
QA Department
90037

THIRD PARTY Thermo Scientific I-Chem CERTIFIED AUDITED

Thermo SCIENTIFIC

PRODUCT CERTIFICATE

Item Description: 250mL Amber Boston Round

Production Number: 00076292

Item Number: S349-0250

Group 3 is applicable