

Specification Sheet Reagent 50™

Detrex[®] Reagent 50™ 20°

20° Baume ACS Reagent Grade 50ppb Trace Metal Hydrochloric Acid

CAS No. 7647-01-0

<u>Parameter</u>	<u>Specification*</u>	<u>Detrex Typical</u>
Assay	30.45 – 32.45%	31.45%
Color (APHA)	10 APHA	< 10 APHA
Residue after Ignition	5 ppm	< 5 ppm
Bromide (Br)	0.005%	< 0.0025%
Sulfate (SO ₄)	1 ppm	< 0.3 ppm
Sulfite (SO ₃)	1 ppm	< 0.25 ppm
Free Chlorine (Cl)	1 ppm	< 1 ppm
Ammonium (NH ₄)	3 ppm	< 0.01 ppm
Arsenic (As)	0.01 ppm	< 0.001 ppm
Heavy Metals (by ICP-OES)	1 ppm	< 0.01 ppm
Iron (Fe)	0.2 ppm	< 0.02 ppm

*Reagent Chemicals 11th Edition Specifications and Procedures

*All analytical testing is performed in accordance with the monograph requirements or with validated alternative test methods.

<u>Trace Metal Element</u>	<u>Specification</u>	<u>Detrex Typical*</u>
Aluminum (Al)	50 ppb max	< 25 ppb
Antimony (Sb)	50 ppb max	< 25 ppb
Arsenic (As)	50 ppb max	< 25 ppb
Barium (Ba)	50 ppb max	< 25 ppb
Beryllium (Be)	50 ppb max	< 25 ppb
Bismuth (Bi)	50 ppb max	< 25 ppb
Boron (B)	50 ppb max	< 25 ppb
Cadmium (Cd)	50 ppb max	< 25 ppb
Calcium (Ca)	50 ppb max	< 25 ppb
Chromium (Cr)	50 ppb max	< 25 ppb
Cobalt (Co)	50 ppb max	< 25 ppb
Copper (Cu)	50 ppb max	< 25 ppb
Gallium (Ga)	50 ppb max	< 25 ppb
Germanium (Ge)	50 ppb max	< 25 ppb
Gold (Au)	50 ppb max	< 25 ppb
Indium (In)	50 ppb max	< 25 ppb
Iron (Fe)	50 ppb max	< 25 ppb
Lead (Pb)	50 ppb max	< 25 ppb
Lithium (Li)	50 ppb max	< 25 ppb
Magnesium (Mg)	50 ppb max	< 25 ppb
Manganese (Mn)	50 ppb max	< 25 ppb
Molybdenum (Mo)	50 ppb max	< 25 ppb
Nickel (Ni)	50 ppb max	< 25 ppb
Niobium (Nb)	50 ppb max	< 25 ppb
Platinum (Pt)	50 ppb max	< 25 ppb
Potassium (K)	50 ppb max	< 25 ppb
Silicon (Si)	50 ppb max	< 25 ppb
Silver (Ag)	50 ppb max	< 25 ppb
Sodium (Na)	50 ppb max	< 25 ppb
Strontium (Sr)	50 ppb max	< 25 ppb
Tantalum (Ta)	50 ppb max	< 25 ppb



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Thallium (Tl)	50 ppb max	< 25 ppb
Thorium (Th)	50 ppb max	< 25 ppb
Tin (Sn)	50 ppb max	< 25 ppb
Titanium (Ti)	50 ppb max	< 25 ppb
Vanadium (V)	50 ppb max	< 25 ppb
Zinc (Zn)	50 ppb max	< 25 ppb
Zirconium (Zr)	50 ppb max	< 25 ppb

*All testing completed with PerkinElmer ICP/MS