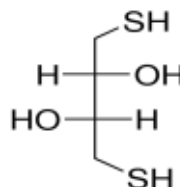


Product Specification

Product Name:
DL-Dithiothreitol – BioUltra, for molecular biology, ≥99.5% (RT)

Product Number: 43815
CAS Number: 3483-12-3
MDL: MFCD00004877
Formula: C₄H₁₀O₂S₂
Formula Weight: 154.25 g/mol
Storage Temperature: 2 - 8 °C



TEST	Specification
Sulfate (SO ₄)	≤ 0.005 %
Solubility (Color)	Colorless
Solubility (Turbidity)	Clear
0.463 G in 30 ml H ₂ O (0.1M)	
Appearance (Color)	Colorless or White
Appearance (Form)	Powder
Fine crystals to crystals	
Redox Titration	99.5 - 100.5 %
Residue (Filter Test)	Pass
Infrared spectrum	Conforms to Structure
Metal Trace Analysis (ICP)	Corresponds to Requirements
Aluminum (ICP)	≤ 5 mg/kg
Barium (ICP)	≤ 5 mg/kg
Bismuth (ICP)	≤ 5 mg/kg
Calcium (ICP)	≤ 10 mg/kg
Cadmium (ICP)	≤ 5 mg/kg
Cobalt (ICP)	≤ 5 mg/kg
Chromium (ICP)	≤ 5 mg/kg
Copper (ICP)	≤ 5 mg/kg
Iron (ICP)	≤ 5 mg/kg
Potassium (ICP)	≤ 50 mg/kg
Lithium (ICP)	≤ 5 mg/kg
Magnesium (ICP)	≤ 5 mg/kg
Manganese (ICP)	≤ 5 mg/kg

Sigma-Aldrich warrants, that at the time of the quality release or subsequent retest date this product conformed to the information contained in this publication. The current Specification sheet may be available at Sigma-Aldrich.com. For further inquiries, please contact Technical Service. Purchaser must determine the suitability of the product for its particular use. See reverse side of invoice or packing slip for additional terms and conditions of sale.



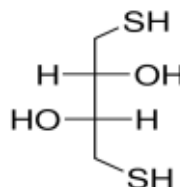
3050 Spruce Street, Saint Louis, MO 63103, USA

Website: www.sigmaaldrich.comEmail USA: techserv@sial.comOutside USA: eurtechserv@sial.com

Product Specification

Product Name:
DL-Dithiothreitol – BioUltra, for molecular biology, ≥99.5% (RT)

Product Number: 43815
CAS Number: 3483-12-3
MDL: MFCD00004877
Formula: C₄H₁₀O₂S₂
Formula Weight: 154.25 g/mol
Storage Temperature: 2 - 8 °C



TEST	Specification
Molybdenum (ICP)	≤ 5 mg/kg
Sodium (ICP)	≤ 500 mg/kg
Nickel (ICP)	≤ 5 mg/kg
Lead (ICP)	≤ 5 mg/kg
Strontium (ICP)	≤ 5 mg/kg
Zinc (ICP)	≤ 5 mg/kg
Arsenic Traces (MHS-AAS)	≤ 0.5 mg/kg
Extraneous Activities DNASES, RNASES, PROTEASES, PHOSPHATASES	None Detected
Recommended Retest Period 2 years	-----
UV Absorbance 260nm	≤ 0.4
UV Absorbance 280nm	≤ 0.1
pH 0.1M	4.0 - 6.5
Remark on UV spectroscopy 4,5-dihydroxy-1,2-dithiane	≤ 0.3 %

Specification: PRD.0.ZQ5.10000103648

Sigma-Aldrich warrants, that at the time of the quality release or subsequent retest date this product conformed to the information contained in this publication. The current Specification sheet may be available at Sigma-Aldrich.com. For further inquiries, please contact Technical Service. Purchaser must determine the suitability of the product for its particular use. See reverse side of invoice or packing slip for additional terms and conditions of sale.

