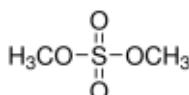


Certificate of Analysis

Product Name:

Dimethyl sulfate - puriss. p.a., ≥99.0% (GC)

Product Number: 41610
Batch Number: BCCL0259
Brand: SIAL
CAS Number: 77-78-1
Formula: C₂H₆O₄S
Formula Weight: 126,13 g/mol
Quality Release Date: 13 OCT 2023
Recommended Retest Date: SEP 2026



Test	Specification	Result
Appearance (Color)	Colorless	Colorless
Appearance (Form)	Liquid	Liquid
Color Test	≤ 25 APHA	24 APHA
Purity (GC)	≥ 99.0 %	99.1 %
Refractive index at 20 °C	1.386 - 1.388	1.387
Residue on Ignition	≤ 0.02 %	0.00 %
¹ H NMR Spectrum	Conforms to Structure	Conforms
Trace Analysis	Corresponds to Requirements	Corresponds
(Additional Tests) Free Acid (as H ₂ SO ₄)		
< = 0.4 %, Solubility (0.26g/ml		
Ethanol and 0.26g/ml Diethylether):		
Clear, Colorless		
Metal Trace Analysis (ICP)	Corresponds to Requirements	Pass
Calcium (Ca)	≤ 5 mg/kg	< 5 mg/kg
Cadmium (Cd)	≤ 1 mg/kg	< 1 mg/kg
Cobalt (Co)	≤ 1 mg/kg	< 1 mg/kg
Chromium (Cr)	≤ 1 mg/kg	< 1 mg/kg
Copper (Cu)	≤ 1 mg/kg	< 1 mg/kg
Iron (Fe)	≤ 1 mg/kg	< 1 mg/kg
Potassium (K)	≤ 20 mg/kg	< 20 mg/kg
Magnesium (Mg)	≤ 1 mg/kg	< 1 mg/kg
Manganese (Mn)	≤ 1 mg/kg	< 1 mg/kg
Sodium (Na)	≤ 20 mg/kg	< 20 mg/kg

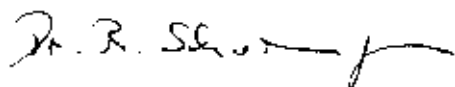
Sigma-Aldrich warrants, that at the time of the quality release or subsequent retest date this product conformed to the information contained in this publication. The current Specification sheet may be available at Sigma-Aldrich.com. For further inquiries, please contact Technical Service. Purchaser 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.



Certificate of Analysis

Product Number: 41610
Batch Number: BCCL0259

Test	Specification	Result
Nickel (Ni)	≤ 1 mg/kg	< 1 mg/kg
Lead (Pb)	≤ 1 mg/kg	< 1 mg/kg
Zinc (Zn)	≤ 1 mg/kg	< 1 mg/kg



Dr. Reinhold Schwenninger
Quality Assurance
Buchs, Switzerland CH

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.

