

Certificate of Analysis

Date of Testing: 2023-12-27 13:55:00
 Date of Next Testing: 2027-12-26 13:55:00
 Product Name: **Dimethyl sulfoxide (DMSO)**
 CAS Number: 67-68-5
 Specifications & Purity: Ultra Pure Grade , $\geq 99.9\%$
 Lot #: L2320361
 SKU #: **D274279**
Analysis: **309387**
 Storage Temperature: Room temperature, Argon charged

Parameter	Limit Values	Result
Purity(GC)	99.9-100 (%)	99.98 %
Water by Karl Fischer	0-0.1 (%)	0.01 %
free acid (as CH ₃ COOH)	0-0.001 (%)	0.00 %
Evaporation Residue	0-0.005 (%)	0.00 %
Aluminum(Al)	0-0.5 (ppm)	0.00 ppm
Barium(Ba)	0-0.1 (ppm)	0.00 ppm
Bismuth(Bi)	0-0.1 (ppm)	0.00 ppm
Calcium(Ca)	0-0.5 (ppm)	0.00 ppm
Cadmium(Cd)	0-0.05 (ppm)	0.00 ppm
Cobalt(Co)	0-0.02 (ppm)	0.00 ppm
Chromium(Cr)	0-0.02 (ppm)	0.00 ppm
Copper(Cu)	0-0.02 (ppm)	0.00 ppm
Iron(Fe)	0-0.5 (ppm)	0.00 ppm
Potassium(K)	0-0.5 (ppm)	0.00 ppm
Lithium(Li)	0-0.1 (ppm)	0.00 ppm
Magnesium(Mg)	0-0.1 (ppm)	0.00 ppm
Manganese(Mn)	0-0.02 (ppm)	0.00 ppm
Molybdenum(Mo)	0-0.1 (ppm)	0.00 ppm
Sodium(Na)	0-1 (ppm)	0.00 ppm
Nickel(Ni)	0-0.5 (ppm)	0.00 ppm
Lead(Pb)	0-0.1 (ppm)	0.00 ppm
Strontium(Sr)	0-0.1 (ppm)	0.00 ppm
Zinc(Zn)	0-0.1 (ppm)	0.00 ppm
Refractive index n ₂₀ /D	1.477-1.48	1.48
Appearance(D274279)	Colorless Liquid	Colorless liquid
Infrared spectrum	Conforms to Structure	Conforms to Structure



ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

A handwritten signature in black ink that reads "John Su".

John Su
QA & QC Manager