

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

Certificate of Analysis

Date of Testing:	2025-09-01 18:30:04
Date of Next Testing:	2028-08-31 18:30:04
Product Name:	Poly(ethylene glycol) (PEG)
CAS Number:	25322-68-3
Specifications & Purity:	UltraBio™, Ultra pure, 400
Lot #:	H2525548
SKU #	P615470
Version	2
Analysis #:	548364

Parameter	Limit Values	Result
Density(D20/4°C)	1.125-1.127	1.13
Refractive index n20/D	1.466-1.468	1.47
Water by Karl Fischer	0-1 (%)	0.10 %
Sulfated Ash	0-0.2 (%)	0.10000 %
Viscosity(neat/20 °C)	105-152 (mPa·S)	121.00000 mPa·S
Hydroxyl value	267-295 (mgKOH/g)	273.00 mgKOH/g
Trace peroxide(As H2O2)	0-200 (ppm)	1.56800 ppm
Aluminum(Al)	0-5 (ppm)	0.52 ppm
Bismuth(Bi)	0-5 (ppm)	0.25 ppm
Calcium(Ca)	0-10 (ppm)	1.82 ppm
Cadmium(Cd)	0-5 (ppm)	0.02 ppm
Cobalt(Co)	0-5 (ppm)	0.42 ppm
Chromium(Cr)	0-5 (ppm)	0.05 ppm
Copper(Cu)	0-5 (ppm)	0.48 ppm
Iron(Fe)	0-5 (ppm)	0.18 ppm
Potassium(K)	0-200 (ppm)	1.49 ppm
Lithium(Li)	0-5 (ppm)	0.04 ppm
Magnesium(Mg)	0-5 (ppm)	0.52 ppm
Manganese(Mn)	0-5 (ppm)	0.48 ppm
Molybdenum(Mo)	0-5 (ppm)	0.04 ppm
Sodium(Na)	0-300 (ppm)	5.63 ppm
Nickel(Ni)	0-5 (ppm)	0.41 ppm
Lead(Pb)	0-5 (ppm)	0.23 ppm
Strontium(Sr)	0-5 (ppm)	0.05 ppm
Zinc(Zn)	0-5 (ppm)	0.42 ppm
Arsenic Traces	0-0.1 (ppm)	0.03200 ppm

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Parameter	Limit Values	Result
Total sulfur as SO ₄ (ICP)	0-50 (ppm)	6.83 ppm
Chloride (Cl ⁻)	0-50 (ppm)	2.58 ppm
PH(50 mg/mL in H ₂ O)	5.5-7	5.80000
UV - ABS. AT 260 NM(50 mg/mL in H ₂ O)	0-0.06	0.01000
UV - ABS. AT 280 NM(50 mg/mL in H ₂ O)	0-0.03	0.01000
Barium(Ba)	0-5 (ppm)	0.23 ppm
Appearance(P615470)	Colorless Viscous Liquid or Semi-Solid or Paste or Solid	Colorless Viscous Liquid or Semi-Solid or Paste or Solid
Infrared spectrum	Conforms to Structure	Conforms to Structure
Solubility in H ₂ O,colorless and clear(50 mg/mL)	Pass	Pass
Residue (filter test)	no residue	no residue

John Su
QA & QC Manager