

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2025-12-05 09:22:16  
Date of Next Testing: 2028-12-04 09:22:16  
Product Name: **Poly(ethylene glycol) (PEG)**  
CAS Number: 25322-68-3  
Specifications & Purity: UltraBio™, Ultra pure, 20000  
Lot #: K2528380  
SKU #: **P615480**  
Version: **1**  
Analysis #: **610931**  
Storage Temperature: Room temperature

Parameter	Limit Values	Result
Melting point	63-66 (°C)	63.00000 °C
Water by Karl Fischer	0-1 (%)	0.10 %
Sulfated Ash	0-0.2 (%)	0.00000 %
Viscosity(50% in H2O, 20°C)	2700-3500 (mPa·S)	3150.00000 mPa·S
Hydroxyl value	4.5-7.0 (mgKOH/g)	5.70 mgKOH/g
traces peroxide (as H2O2)	0-10 (ppm)	1.52600 ppm
Aluminium(Al)	0-5 (ppm)	0.01400 ppm
Barium(Ba)	0-5 (ppm)	0.02 ppm
Bismuth(Bi)	0-5 (ppm)	0.04 ppm
Calcium(Ca)	0-10 (ppm)	1.52 ppm
Cadmium(Cd)	0-5 (ppm)	0.00 ppm
Cobalt(Co)	0-5 (ppm)	0.04 ppm
Chromium(Cr)	0-5 (ppm)	0.16 ppm
Copper(Cu)	0-5 (ppm)	0.14 ppm
Iron(Fe)	0-5 (ppm)	0.10 ppm
Potassium(K)	0-200 (ppm)	12.52 ppm
Lithium(Li)	0-5 (ppm)	0.02 ppm
Magnesium(Mg)	0-5 (ppm)	0.41 ppm
Manganese(Mn)	0-5 (ppm)	0.04 ppm
Molybdenum(Mo)	0-5 (ppm)	0.53 ppm
Sodium(Na)	0-200 (ppm)	14.25 ppm
Nickel(Ni)	0-5 (ppm)	0.26 ppm
Lead(Pb)	0-5 (ppm)	0.15 ppm
Strontium(Sr)	0-5 (ppm)	0.12 ppm
Zinc(Zn)	0-5 (ppm)	0.25 ppm

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Parameter	Limit Values	Result
Arsenic traces(MHS-AAS)	0-0.1 (ppm)	0.01 ppm
Chloride (Cl-)	0-50 (ppm)	2.25 ppm
PH(25 °C, 1.5g/30ml in Water)	5.5-7.0	6.30000
UV Absorbance 260nm (50 mg/mL in H2O)	≤ 0.15	0.06000
UV Absorbance 280nm (50 mg/mL in H2O)	≤ 0.20	0.12000
Total sulfur as SO4 (ICP)	0-50 (ppm)	1.53 ppm
Appearance(P615480)	Colorless or White Powder or Crystals or Flakes	Colorless or White Powder or Crystals or Flakes
Infrared spectrum	Conforms to Structure	Conforms to Structure
Solubility in H2O , 50mg/ml, clear, colorless	pass	Pass

John Su  
QA & QC Manager