

Certificate of Analysis

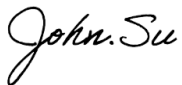
Date of Testing: 2024-04-16 11:42:17
 Date of Next Testing: 2027-04-16 11:42:17
 Product Name: **Poly(ethylene glycol)**
 CAS Number: 25322-68-3
 Specifications & Purity: Ultrapure BioReagent, 3,350
 Lot #: D2412429
 SKU #: **P432424**
Analysis: 322928

Parameter	Limit Values	Result
Water by Karl Fischer	0-1 (%)	0.32 %
Residue on Ignition	0-0.2 (%)	0.04000 %
Viscosity(50% in H ₂ O , 20°C)	65-130 (mPa·S)	108.80000 mPa·S
Molecular Number by GPC	3015-3685	3567.00
Aluminium(Al)	0-5 (ppm)	0.00000 ppm
Barium(Ba)	0-5 (ppm)	0.00 ppm
Bismuth(Bi)	0-5 (ppm)	0.00 ppm
Calcium(Ca)	0-10 (ppm)	0.00 ppm
Cadmium(Cd)	0-5 (ppm)	0.00 ppm
Cobalt(Co)	0-5 (ppm)	0.00 ppm
Chromium(Cr)	0-5 (ppm)	0.00 ppm
Copper(Cu)	0-5 (ppm)	0.00 ppm
Iron(Fe)	0-5 (ppm)	0.00 ppm
Potassium(K)	0-200 (ppm)	0.00 ppm
Lithium(Li)	0-5 (ppm)	0.00 ppm
Magnesium(Mg)	0-5 (ppm)	0.00 ppm
Manganese(Mn)	0-5 (ppm)	0.00 ppm
Molybdenum(Mo)	0-5 (ppm)	0.00 ppm
Sodium(Na)	0-200 (ppm)	109.00 ppm
Nickel(Ni)	0-5 (ppm)	0.00 ppm
Lead(Pb)	0-5 (ppm)	0.00 ppm
Strontium(Sr)	0-5 (ppm)	0.00 ppm
Zinc(Zn)	0-5 (ppm)	0.00 ppm
Arsenic traces(MHS-AAS)	0-0.1 (ppm)	0.00 ppm
Total sulfur as SO ₄ (ICP)	0-50 (ppm)	0.00 ppm
Chloride (Cl ⁻)	0-50 (ppm)	0.00 ppm
PH(5% in water)	4.5-7.0	7.00

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

Parameter	Limit Values	Result
UV-ABS.at 260 nm	0-0.06	0.03800
UV-ABS.at 280 nm	0-0.03	0.01900
Hydroxyl value	30.3-37.4 (mgKOH/g)	30.31 mgKOH/g
Trace peroxide(As H ₂ O ₂)	0-10 (ppm)	9.00000 ppm
Appearance(P432424)	White Powder	White powder
Infrared spectrum	Conforms to Structure	Conforms to Structure
Solubility,1.500 g in 30 ml H ₂ O,clear colorless	Pass	Pass
Residue (filter test)	no residue	no residue



John Su
QA & QC Manager