

## Certificate of Analysis

Date of Testing: 2022-12-21 14:35:04  
Date of Next Testing: 2026-12-20 14:35:04  
Product Name: **Poly(propylene glycol)**  
CAS Number: 25322-69-4  
Specifications & Purity: average Mw 1000  
Lot #: K2228625  
SKU #: **P103210**  
Analysis: **124950**

| Parameter                       | Limit Values             | Result                   |
|---------------------------------|--------------------------|--------------------------|
| PH(1% in Isopropanol:Water 3:2) | 4-7                      | 6.93                     |
| Water by Karl Fischer           | 0-0.5 (%)                | 0.12 %                   |
| Hydroxy Value                   | 102-125 (mgKOH/g)        | 105.62 mgKOH/g           |
| Acid Value                      | 0-0.5 (mgKOH/g)          | 0.00 mgKOH/g             |
| Appearance (P103210)            | colorless viscous liquid | colorless viscous liquid |
| Proton NMR spectrum             | Conforms to Structure    | Conforms to Structure    |



John Su  
QA & QC Manager