

## Certificate of Analysis

Date of Testing: 2023-09-09 09:55:27  
Date of Next Testing: 2027-09-08 09:55:27  
Product Name: **Poly(propylene glycol)**  
CAS Number: 25322-69-4  
Specifications & Purity: average Mw 400  
Lot #: I2306561  
SKU #: **P103209**  
Analysis: **245053**

| Parameter                    | Limit Values          | Result                |
|------------------------------|-----------------------|-----------------------|
| Acid Value                   | 0-1 (mgKOH/g)         | 0.00 mgKOH/g          |
| Water by Karl Fischer        | 0-0.5 (%)             | 0.06 %                |
| Hydroxy Value                | 200-270 (mgKOH/g)     | 223.51 mgKOH/g        |
| PH(5% in Methanol:Water 1:1) | 4-7                   | 5.26                  |
| Appearance (P103209)         | Colorless Liquid      | Colorless liquid      |
| Proton NMR spectrum          | Conforms to Structure | Conforms to Structure |



John Su  
QA & QC Manager