

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2022-09-27 09:26:58  
Date of Next Testing: 2026-09-26 09:26:58  
Product Name: **Glycerol**  
CAS Number: 56-81-5  
Specifications & Purity: EP,BP,JP,USP grade  
Lot #: I2223573  
SKU #: **G116214**  
Analysis: **135003**

| Parameter   | Limit Values             | Result                   |
|---|--------------------------|--------------------------|
| Refractive index n <sub>20</sub> /D                                   | 1.47-1.475               | 1.47                     |
| Density (20°C)  | 1.26-1.264               | 1.26                     |
| Ignition Residue  | 0-0.01 (%)               | 0.00 %                   |
| Heavy metals  | 0-5 (ppm)                | 1.43 ppm                 |
| Chloride Content  | 0-0.001 (%)              | 0.00 %                   |
| Total impurities  | 0-1 (%)                  | 0.00 %                   |
| Fatty Acid Esters(Volume of 0.5N NaOH)                                | 0-1 (ml)                 | 0.00 ml                  |
| Water by Karl Fischer   | 0-5 (%)                  | 0.46 %                   |
| Chloride (Cl <sup>-</sup> )   | 0-0.003 (%)              | 0.00 %                   |
| Sulfate(SO <sub>4</sub> <sup>2-</sup> )                               | 0-0.002 (%)              | 0.00 %                   |
| Purity C <sub>3</sub> H <sub>8</sub> O <sub>3</sub> (anhydrous basis) | 99-101 (%)               | 99.14 %                  |
| Appearance (G116214)  | colorless viscous liquid | colorless viscous liquid |
| Infrared spectrum   | Conforms to Structure    | Conforms to Structure    |



John Su  
QA & QC Manager