

## Certificate of Analysis

Date of Testing: 2022-12-09 17:16:05  
 Date of Next Testing: 2026-12-08 17:16:05  
 Product Name: **Isopropyl Alcohol**  
 CAS Number: 67-63-0  
 Specifications & Purity: Analytical Reagent, ≥99.7%  
 Lot #: K2223081  
 SKU #: **I112011**  
 Analysis: **159866**

| Parameter                                  | Limit Values       | Result           |
|--|--------------------|------------------|
| Assay                                      | 99.7-100 (%)       | 99.97200 %       |
| Carbonyl Compounds(as Propional dehyde)    | 0-0.005 (%)        | 0.00000 %        |
| Iron(Fe)                                   | 0-0.00001 (%)      | 0.00000 %        |
| Methanol(CH <sub>3</sub> OH)               | 0-0.1 (%)          | 0.00000 %        |
| Density (20°C)                             | 0.784-0.786 (g/ml) | 0.78600 g/ml     |
| Refractive index n <sub>20</sub> /D        | 1.376-1.379        | 1.37710          |
| Evaporation Residue                        | 0-0.001 (%)        | 0.00000 %        |
| Acidity(as H <sup>+</sup> )                | 0-0.3 (μmol/g)     | 0.00000 μmol/g   |
| Water by Karl Fischer                      | 0-0.1 (%)          | 0.02 %           |
| Appearance (I112011)                       | Colorless Liquid   | Colorless liquid |
| Miscibility with water                     | Pass               | Pass             |
| Potassium permanganate reducing substances | Pass               | Pass             |
| Readily carbonizable substance             | Pass               | Pass             |



John Su  
QA & QC Manager