

## Certificate of Analysis

Date of Testing: 2022-07-05 17:17:03  
Date of Next Testing: 2024-06-24 17:17:03  
Product Name: **1,4-Dioxane**  
CAS Number: 123-91-1  
Specifications & Purity: Analytical Reagent, 99%, contains 20-30 ppm BHT as stabilizer  
Lot #: F2209134  
SKU #: **D116157**  
Analysis: **061870**

| Parameter                                   | Limit Values          | Result                |
|---|-----------------------|-----------------------|
| Density (20°C)                              | 1.033-1.037           | 1.04                  |
| Water by Karl Fischer                       | 0-0.1 (%)             | 0.02 %                |
| Iron(Fe)                                    | 0-0.0001 (%)          | 0.00 %                |
| Refractive index n <sub>20</sub> /D         | 1.42-1.424            | 1.42                  |
| Titration Acid                              | 0-0.2 (mg/g)          | 0.13 mg/g             |
| Peroxide(as H <sub>2</sub> O <sub>2</sub> ) | 0-0.005 (%)           | 0.00 %                |
| Purity(GC)                                  | 99-100 (%)            | 99.88 %               |
| Crystallization point                       | 10-12 (°C)            | 10.16 °C              |
| Evaporation Residue                         | 0-0.005 (%)           | 0.00 %                |
| Color Test                                  | 0-20                  | 19.22                 |
| Appearance (D116157)                        | Colorless Liquid      | Colorless liquid      |
| Infrared spectrum                           | Conforms to Structure | Conforms to Structure |



John Su  
QA & QC Manager