

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2024-09-21 16:20:18  
 Date of Next Testing: 2026-09-11 16:20:18  
 Product Name: **Pyruvic acid**  
 CAS Number: 127-17-3  
 Specifications & Purity:  $\geq 98\%$ (T)  
 Lot #: I2406442  
 SKU #: **P104138**  
 Version: **1**  
 Analysis #: **404111**  
 Storage Temperature: Store at 2-8°C, Argon charged

| Parameter                           | Limit Values                                     | Result                                           |
|-------------------------------------|--------------------------------------------------|--------------------------------------------------|
| Density (20°C)                      | 1.267-1.275                                      | 1.26950                                          |
| Purity (Titration by NaOH)          | 97.5-102.5 (%)                                   | 99.31000 %                                       |
| Refractive index n <sub>20</sub> /D | 1.425-1.43                                       | 1.42950                                          |
| Water by Karl Fischer               | 0-1.5 (%)                                        | 1.49520 %                                        |
| Purity(GC)                          | 96-100 (%)                                       | 96.01000 %                                       |
| Appearance (P104138)                | Colorless to Light Yellow or Yellow-Green Liquid | Colorless to Light Yellow or Yellow-Green Liquid |
| Infrared spectrum                   | Conforms to Structure                            | Conforms to Structure                            |



John Su  
QA & QC Manager