

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2024-04-18 17:10:46

Date of Next Testing: 2026-04-08 17:10:46

Product Name: **Pyruvic acid**

CAS Number: 127-17-3

Specifications & Purity:  $\geq 98\%$ (T)

Lot #: D2415103

SKU #: **P104138**

Version: **1**

Analysis #: **339754**

Storage Temperature: Store at 2-8°C, Argon charged

| Parameter                           | Limit Values                                     | Result                                           |
|-------------------------------------|--------------------------------------------------|--------------------------------------------------|
| Density (20°C)                      | 1.267-1.275                                      | 1.26810                                          |
| Water by Karl Fischer               | 0-1.5 (%)                                        | 1.34340 %                                        |
| Purity (Titration by NaOH)          | 97.5-102.5 (%)                                   | 99.21000 %                                       |
| Refractive index n <sub>20</sub> /D | 1.425-1.43                                       | 1.42940                                          |
| Sulfate Ash                         | 0-0.01 (%)                                       | 0.00320 %                                        |
| Purity(GC)                          | 96-100 (%)                                       | 98.41100 %                                       |
| 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                            |



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QA & QC Manager