

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2022-02-18 16:43:13  
 Date of Next Testing: 2026-02-17 16:43:13  
 Product Name: **Methyl 3-amino-2-pyrazinecarboxylate**  
 CAS Number: 16298-03-6  
 Specifications & Purity:  $\geq 98\%$ (GC)  
 Lot #: B2216139  
 SKU #: **M123716**  
 Version: **1**  
 Analysis #: **075475**  
 Storage Temperature: Room temperature

| Parameter                                     | Limit Values                               | Result                                     |
|-----------------------------------------------|--------------------------------------------|--------------------------------------------|
| Purity(Nonaqueous Titration)                  | 98-100 (%)                                 | 98.02000 %                                 |
| Purity(GC)                                    | 98-100 (%)                                 | 98.81220 %                                 |
| Nitrogen by Elemental Analysis                | 26.5-28.4 (%)                              | 27.80000 %                                 |
| Carbon by Elemental Analysis                  | 45.4-48.7 (%)                              | 46.20000 %                                 |
| Melting point                                 | 170-173 (°C)                               | 170.50000 °C                               |
| Appearance (M123716)                          | Yellow to Orange Solid, Powder or Crystals | Yellow to Orange Solid, Powder or Crystals |
| Solubility in hot MeOH , very faint turbidity | pass                                       | Pass                                       |
| Proton NMR spectrum                           | Conforms to structure                      | Conforms to Structure                      |



John Su  
QA & QC Manager