

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2026-08-06 15:43:55

Date of Next Testing: 2028-08-05 15:43:55

Product Name: **Glycyrrhizic acid ammonium salt**

CAS Number: 53956-04-0

Specifications & Purity:  $\geq 70\%$ (HPLC)

Lot #: B2303357

SKU #: **G109353**

Version: **0**

Analysis #: **751453**

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

| Parameter                                                                  | Limit Values           | Result                 |
|----------------------------------------------------------------------------|------------------------|------------------------|
| Purity(HPLC)                                                               | 70-100 (%)             | 84.88400 %             |
| Sulfate Ash                                                                | 0-0.2 (%)              | 0.15080 %              |
| $\alpha$ -glycyrrhizic acid (HPLC)                                         | 0-10 (%)               | 6.27600 %              |
| Specific Rotation $[\alpha]_{20/D}(c=1 \text{ in EtOH } 50\% \text{ v/v})$ | 49-54 ( $^{\circ}$ )   | 51.75100 $^{\circ}$    |
| Loss on drying                                                             | 0-6 (%)                | 2.04750 %              |
| Heavy metal (as Pb)                                                        | 0-20 (ppm)             | 6.35800 ppm            |
| Residual solvents                                                          | 0-1 (%)                | 0.35580 %              |
| Appearance (G109353)                                                       | White to Yellow Powder | White to Yellow Powder |
| Infrared spectrum                                                          | Conforms to Structure  | Conforms to Structure  |



John Su  
QA & QC Manager