

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2023-11-16 10:07:08

Date of Next Testing: 2025-11-15 10:07:08

Product Name: **Di-p-toluoyl-L-tartaric acid**

CAS Number: 32634-66-5

Specifications & Purity:  $\geq 99\%$

Lot #: D2013132

SKU #: **D196348**

Version: **0**

Analysis #: **295905**

Storage Temperature: Room temperature, Argon charged

| Parameter                                                | Limit Values                        | Result                              |
|----------------------------------------------------------|-------------------------------------|-------------------------------------|
| Purity(Neutralization titration)                         | 98.5-101.5 (%)                      | 99.38800 %                          |
| Purity(HPLC)                                             | 99-100 (%)                          | 99.21400 %                          |
| Specific Rotation $[\alpha]_{20/D(c=1 \text{ in EtOH})}$ | -143--136 (°)                       | -139.50000 °                        |
| Melting point                                            | 166-171 (°C)                        | 167.35000 °C                        |
| Appearance (D196348)                                     | White to off-white or yellow powder | White to off-white or yellow powder |
| Proton NMR spectrum                                      | Conforms to Structure               | Conforms to Structure               |



John Su  
QA & QC Manager