

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

## Certificate of Analysis

Date of Testing: 2025-09-15 17:39:30

Date of Next Testing: 2028-09-14 17:39:30

Product Name: **Methotrexate hydrate**

CAS Number: 133073-73-1

Specifications & Purity: PharmPure™, USP

Lot #: I2511075

SKU # **M476589**

Version **2**

**Analysis #:** **334182**

Storage Temperature: Protected from light,Store at -20°C,Argon charged

| Parameter                                                                            | Limit Values          | Result                |
|--------------------------------------------------------------------------------------|-----------------------|-----------------------|
| Water by Karl Fischer                                                                | 0-12 (%)              | 11.59 %               |
| Assay (Anhydrous Basis)                                                              | 98-100 (%)            | 99.63 %               |
| specific rotation [ $\alpha$ ] <sub>20/D</sub> (c=10mg/ml in 0.05M sodium carbonate) | 19-24 (°)             | 19.10000 °            |
| Residue on ignition(Ash)                                                             | 0-0.1 (%)             | 0.00000 %             |
| Related Compounds(Any unspecific impurity)                                           | ≤0.10 (%)             | 0.08300 %             |
| Related Compounds(Total impurities)                                                  | ≤1.0 (%)              | 0.41000 %             |
| NMR Spectrum 1H                                                                      | Conforms to Structure | Conforms to Structure |
| Related Compounds(Individual impurities)                                             | Pass                  | Pass                  |



John Su  
QA & QC Manager