

ALADDIN SCIENTIFIC CORPORATION

14078 Meridian Parkway, Riverside, CA. 92518

Certificate of Analysis

Date of Testing: 2025-04-08 10:13:30
Date of Next Testing: 2029-04-07 10:13:30
Product Name: **Methotrexate hydrate**
CAS Number: 133073-73-1
Specifications & Purity: $\geq 99\%$
Lot #: F2121208
SKU #: **M111239**
Version: **0**
Analysis #: **491196**
Storage Temperature: Store at -20°C , Argon charged

Parameter	Limit Values	Result
Ignition Residue(Ash)	0-0.1 (%)	0.05 %
Water by Karl Fischer	$\leq 12(\%)$	9.97 %
Specific Rotation $[\alpha]_{20/D}(c=10\text{mg/ml in } 0.05\text{M NaOH})$	19-24 ($^{\circ}$)	20.20 $^{\circ}$
Purity(HPLC)	99-100 (%)	99.30000 %
Appearance (M111239)	Yellow to Yellow-Orange Powder	Yellow to Yellow-Orange Powder
Proton NMR spectrum	Conforms to Structure	Conforms to Structure
Solubility in 1 M NH ₄ OH , Yellow to Orange Clear(50 mg + 1 ml)	pass	Pass



John Su
QA & QC Manager