

CERTIFICATE OF ANALYSIS

1. Identification

Catalogue Number

Lot Number

2-ZPK-113-1 M260675

Product Name

Methotrexate

Synonyms

N-[4-[[(2,4-Diamino-6-pteridinyl)methyl]methylamino]benzoyl]-L-glutamic Acid; (+)-Amethopterin; 4-Amino-N10-methylpteroylglutamic Acid; 4-Amino-N10-methylfolic Acid; Antifolan; CL 14377; EMT 25299; Emtexate; Ledertrexate; MTX; L-Metatrexan; Methylaminopterin; Mexate; NSC 740; R 9985; Rheumatrex; Trexall;

CAS Number Solubility

59-05-2 Aqueous Base (Slightly), DMSO

(Slightly)

Source of Product Molecular Formula

 $C_{20}H_{22}N_8O_5$ N/A

Molecular Weight Purity >95% 454.45

2. Warnings

Hygroscopic

3. Analytical Information

Specifications Tests Results Appearance Yellow to Dark Yellow Solid Yellow Solid Conforms to Structure Conforms **Elemental Analysis** Conforms %C: 47.39, %H: 5.36, %N: 22.07 **HPLC** Purity >95% 98.45% (305 nm) MS Conforms to Structure Conforms

Structure

Shipping Condition

This Product Is Stable To Be Shipped At Room Temperature

Long Term Storage Conditions

4°C, Hygroscopic

Additional Information

N/A

Purity is based on the analytical results of the tests performed. NMR and Elemental Analysis (if available) may have an accuracy of ± 2%. Isotopic purity is based on mass distribution observed.

The contents of the specifications are subject to change without advance notice, and the specification values displayed here are the most up to date values.

4. Signatures

Reviewed by C of A Approved by Reviewed by **Test Date Retest Date** 4/5/2024 Sharme 4/3/2028

Meenakshi Sharma Chanell Chu Toni Rantanen

Product Quality Specialist Manager, Quality Assurance Quality Assurance Associate