

CERTIFICATE OF ANALYSIS

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1. Identification

Catalogue B318155 CAS 633-66-9 Number: Number:

> Synonym: 7,8,13,13a-tetradehydro-9,10-dimethoxy-2,3-

> > (methylenedioxy)Berbinium Sulfate; ‡Berberine Bisulfate; Berberine Hemisulfate; Berberine

Hydrogen Sulfate; Berberine Sulfate; Berberine Sulfate (1:1); NSC 150444

Molecular Formula:

C20H19NO8S

Molecular weight:

433.43

Source of Product:

N/A

Solubility:

DMSO (Slightly), Methanol

(Slightly)

Purity: 98%

Storage Condition: -20°C

Structure:

Product:

MeC ÔМе

Berberine Hydrogen Sulphate

Lot 2023-JPO-023 Number:

This Product Is Stable To Be Shipping Condition: Shipped At Room Temperature

2. Warning

Appearance

Warning 1: Warning 2: Warning 3:

3. Analytical Information

Tests: Specifications: Results:

> Yellow to Dark Yellow Solid Dark Yellow Solid

Conforms to Structure **NMR** Conforms

Elemental Conforms %C: 54.32, %H: 4.36, %N: 3.58 Analysis

HPLC Purity Report Result 99.20% (345 nm)

MS Conforms to Structure Conforms

Sulfate Content Report Result 20.93% by Ion Chromatography

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 \pm 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

C of A Approved **Reviewed By Reviewed By Test Date Retest Date** Swathi Reddy Toni Rantanen Christina Gouliaras 1/17/2023 1/15/2027

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