

CERTIFICATE OF ANALYSIS

Structure

Shipping Condition

-20°C, Inert atmosphere

Temperature

This Product Is Stable To Be Shipped At Room

Long Term Storage Conditions

1. Identification

Catalogue Number Lot Number 23-JQW-13-2 S699187

Product Name

Sulbactam-d5 Sodium Salt (Major)

Synonyms

(2S,5R)-3,3-Dimethyl-7-oxo-4-thia-1-azabicyclo[3.2.0]heptane-2-carboxylic Acid-d5 4,4-Dioxide Sodium Salt; CP 45899-2-d5; Penicillanic Acid-d5 1,1-Dioxide Sodium Salt; Sodium 1,1-Dioxypenicillanate-d5; Sodium Penicillanate-d5 1,1-Dioxide; Sodium Sulbactam-d5; Sulbactam-d5 Sodium; Sulbactam-d5 Sodium Salt; Unasyn IM-d5;

CAS Number Solubility

1322625-44-4 DMSO (Slightly, Heated), Methanol

(Very Slightly)

Molecular Formula Source of Product

C₈H₅D₅NNaO₅S Synthetic

Molecular Weight Purity >95% 260.25

2. Warnings

Not Determined

3. Analytical Information

Specifications Tests Results Appearance Pale Yellow to Pale Beige Solid Pale Yellow to Pale Beige Solid Conforms to Structure Conforms Elemental Analysis Conforms %C: 35.20, %H: 4.25, %N: 5.24 **HPLC** Purity >95% 100.00% (205 nm) MS Conforms to Structure Conforms Isotopic Purity >95% 98.6% Sodium Content Report Result 8.36% by Ion Chromatography

Additional Information

Normalized Intensity: $d_0 = 0.00\%$, $d_1 = 0.00\%$, $d_2 = 0.01\%$, $d_3 = 0.10\%$, $d_4 = 6.58\%$, $d_5 = 93.31\%$

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** Play 5/4/2023 5/2/2027

Henry Tieu Toni Rantanen Chanell Chu Product Quality Specialist Manager, Quality Assurance Jr. Quality Assurance

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