



CERTIFICATE OF ANALYSIS

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1. Identification

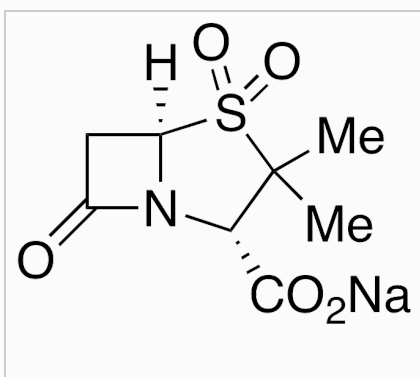
Catalogue Number: S699185

CAS Number: 69388-84-7

Product: Sulbactam Sodium Salt

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

Structure:



Molecular Formula:

C₁₁H₁₃NNaO₄S

Molecular weight:

255.22

Source of Product:

N/A

Solubility:

Methanol (Slightly), Water (Slightly)

Lot Number: 711653458-2-1

Purity: 98%

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

Storage Condition: -20°C, Inert atmosphere

2. Warning

Warning 1:

Warning 2:

Warning 3:

3. Analytical Information

| Tests: | Specifications: | Results: |
|--------------------|----------------------------|-------------------------------|
| Elemental Analysis | Conforms | %C: 37.33, %H: 4.12, %N: 5.34 |
| Appearance | White to Pale Yellow Solid | Pale Yellow Solid |
| NMR | Conforms to Structure | Conforms |
| MS | Conforms to Structure | Conforms |
| Sodium Content | Report Result | 9.22% by Ion Chromatography |
| Specific Rotation | Report Result | +185.7° (c = 0.2, Water) |

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

Henry Tieu



Reviewed By

Toni Rantanen



**C of A Approved
By**

Chanell Chu



Test Date

8/17/2022

Retest Date

8/15/2026