



CERTIFICATE OF ANALYSIS

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1. Identification

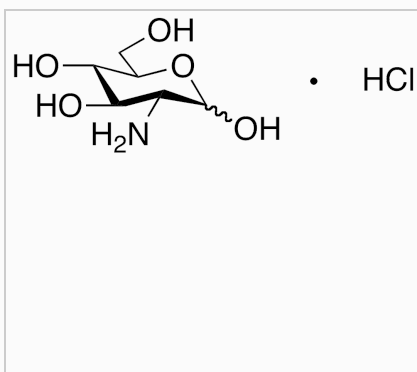
Catalogue Number: G514950

CAS Number: 66-84-2

Product: D-Glucosamine Hydrochloride

Synonym: 2-Amino-2-deoxy-D-glucose Hydrochloride; 2-Deoxy-2-amino-D-glucose Hydrochloride; Chitosamine Hydrochloride; Cosamin; D-(+)-Glucosamine Hydrochloride; D-Glucosamine Chloride; Glucosamine hydrochloride; NSC 234443; NSC 758;

Structure:



Molecular Formula:

$C_6H_{13}NO_5 \cdot HCl$

Molecular weight:

179.17 + 36.46

Source of Product:

N/A

Solubility:

Methanol (Slightly, Heated, Sonicated), Water (Sparingly)

Lot Number: 13-XJZ-183-1

Purity: 98%

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

Storage Condition: 4°C

2. Warning

Warning 1: Not Determined

Warning 2:

Warning 3:

3. Analytical Information

| Tests: | Specifications: | Results: |
|--------------------|--------------------------|-------------------------------|
| Appearance | White to Off-White Solid | White to Off-White Solid |
| NMR | Conforms to Structure | Conforms |
| Elemental Analysis | Conforms | %C: 33.42, %H: 6.52, %N: 6.37 |
| MS | Conforms to Structure | Conforms |
| HPLC Purity | >95% | 99.76% (ELSD) |

Additional Information: Elemental Analysis: (Theoretical) %C: 33.42, %H: 6.54, %N: 6.50

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

| Reviewed By | Reviewed By | C of A Approved By | Test Date | Retest Date |
|-------------|---------------|--------------------|-----------|-------------|
| Nicole Yip | Toni Rantanen | My Nguyen | 7/17/2020 | 7/15/2030 |