



CERTIFICATE OF ANALYSIS

20 Martin Ross Avenue, North York, ON, M3J 2K8, CANADA
Tel: (416) 665-9696, Fax: (416) 665-4439
Email: orders.trc@lgcgroup.com Website: www.trc-canada.com

1. Identification

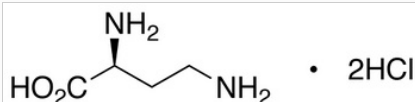
Catalogue Number: D416250

CAS Number: 1883-09-6

Product: L-2,4-Diaminobutyric Acid, Dihydrochloride

Synonym: (2S)-2,4-Diamino-butanoic Acid Dihydrochloride;

Structure:



Molecular Formula:

C₄H₁₂Cl₂N₂O₂

Molecular weight:

191.06

Source of Product:

N/A

Solubility:

Aqueous Acid (Slightly),
Water (Sparingly)

Lot Number: 2022-SAP-135

Purity: 98%

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

Storage Condition: -20°C

2. Warning

Warning 1:

Warning 2:

Warning 3:

3. Analytical Information

Tests:	Specifications:	Results:
Appearance	White to Off-White Solid	Off-White Solid
NMR	Conforms to Structure	Conforms
Elemental Analysis	Conforms	%C: 25.22, %H: 6.44, %N: 14.43
HPLC Purity	Report Result	98.42% (ELSD)
C NMR	Conforms to Structure	Conforms
Chloride Content	Report Result	33.1%
Specific Rotation	Report Result	+12.7° (c = 0.1, 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	Reviewed By	C of A Approved By	Test Date	Retest Date
Nicole Yip	Toni Rantanen	Chanell Chu	12/6/2022	12/4/2026