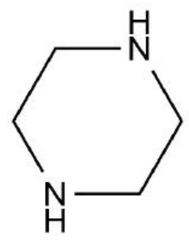
Certificate of Analysis

Reference Material & Standard

Product Name:	Piperazine Hydrate	**Catalogue Number:**	C1288269
Synonyms:	N/A	**Lot Number:**	0831-RH-0001
CAS Number:	142-63-2	**Expiry Date:**	Feb 25, 2028
Molecular Formula:	$C_4H_{10}N_2$ 6*H_2O	**Storage:**	2°C ~ 8°C Protected from light and Sealed
Molecular Weight:	86.14 6*18.02	**Shipping Condition:**	Shipping at Room Temperature
		Warning:	

Chemical Structure:



H_2O H_2O H_2O

H_2O H_2O H_2O

Test Items	Method	Results
Appearance	Visual inspection	Colourless Crystalline Solid
Identification	LCMS&HNMR	Confirmed
Purity	ELSD	100.0%
Assay	qNMR	96.9%

CATO Research Chemicals Inc.

Signature:

Prepared by: Koi Date: Aug 31, 2026

Reviewed by: Lisa Date: Aug 31, 2026

Approved by General Manager: David Date: Aug 31, 2026

CATO Research Chemicals Inc.