

Registered Address: Chemicea Pharmaceuticals Pvt Ltd, Platinum Springs,  
Unit No- A- 205&206 Second floor, Plot No: G-6, G-20 to G 24, Taloja- MIDC, Opp. Dena Bank  
Navi Mumbai 410208, MH, INDIA. Email- [info@chemicea.com](mailto:info@chemicea.com) Mob- +91 9284897978

## CERTIFICATE OF ANALYSIS

Analysis Date: Jun 2023

Re-test Date: May 2025

**Product Name: Glycopyrrolate Impurity 1**

### Identification:

Chemical Name: 3-Hydroxy-1,1-dimethylpyrrolidin-1-ium bromide

Synonyms : NA

CAS Number : 51052-74-5

CAT Number : CP-G2017

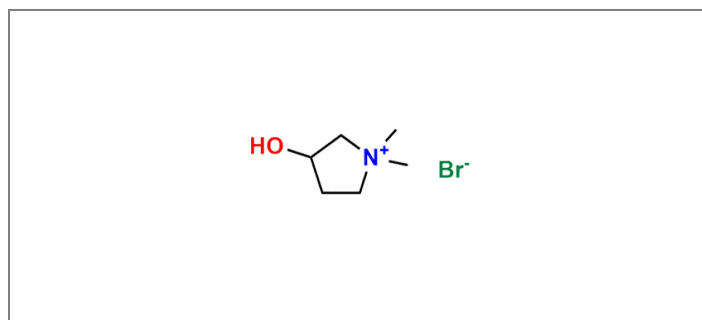
Molecular Formula : C<sub>6</sub>H<sub>14</sub>NO : Br

Molecular Weight : 116.2 : 79.9

Batch Number : CP-MET-PYR-0623

Storage Condition : Tightly closed, Inert atmosphere at -20° C

Shipping condition : At low temperature with dry ice and ice pack gel



### Analytical Information:

Sr. No.	Test	Result
1)	Description	Off White Highly Hygroscopic Solid
2)	Solubility	Soluble in Methanol/DMSO
3)	MASS By LCMS	Confirm to structure
4)	Purity By HPLC	98.61%
5)	H1NMR	Confirm to structure
6)	13CNMR	Confirm to structure



**Prepared and Reviewed By**

Ms Priyanka Salunkhe  
(Manager QC Analytical)

**Approved By**

Ms Rohini Gagare  
(QA Head)

Note: Product supplied by Chemicea are for R&D purpose only and not for human consumptions.