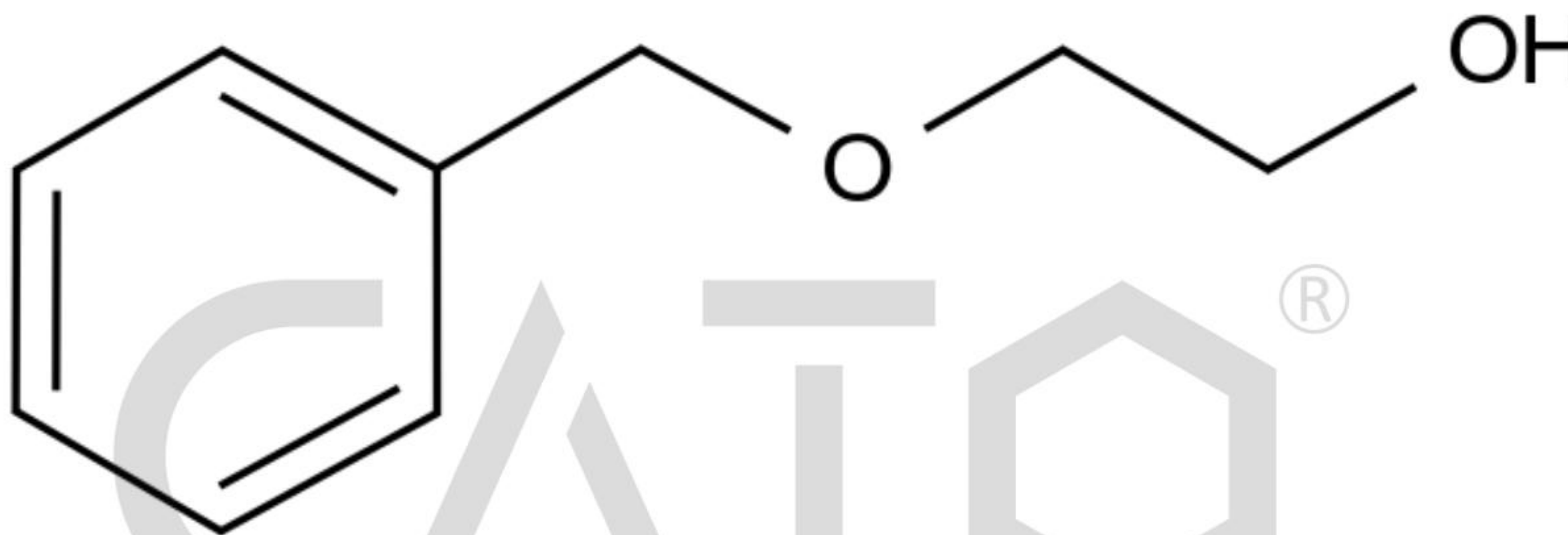


Certificate of Analysis

Reference Material & Standard

Product Name:	Umeclidinium impurity 23	Catalogue Number:	C4X-133923
Synonyms:	N/A	Lot Number:	1127-RG-0019
CAS Number:	622-08-2	Expiry Date:	Dec 01, 2029
Molecular Formula:	C ₉ H ₁₂ O ₂	Storage:	2°C ~ 8°C Protected from light and Sealed
Molecular Weight:	152.19	Shipping Condition:	Shipping at Room Temperature

Chemical Structure:



Test Items	Method	Results
Appearance	Visual inspection	Colourless Liquid
Identification	GCMS&IR&UV&HNMR	Confirmed
Purity	GC	100.000%
Water Content	Karl Fischer	0.2326%
Assay		99.8%

Comment:

The calculation of the mass balance method follows the formula (calculated on the non-dried basis):

$\text{Assay (\%)} = (100\% - \text{Water Content}) * \text{Purity GC (\%)} / 100\%$

Water Content is considered as absolute effect, GC purity is considered as relative effect.

Signature:

Prepared by:

Nice

Reviewed by:

Koi

Approved by General Manager:

David

Date: Dec 02, 2025

Date: Dec 02, 2025

Date: Dec 02, 2025



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