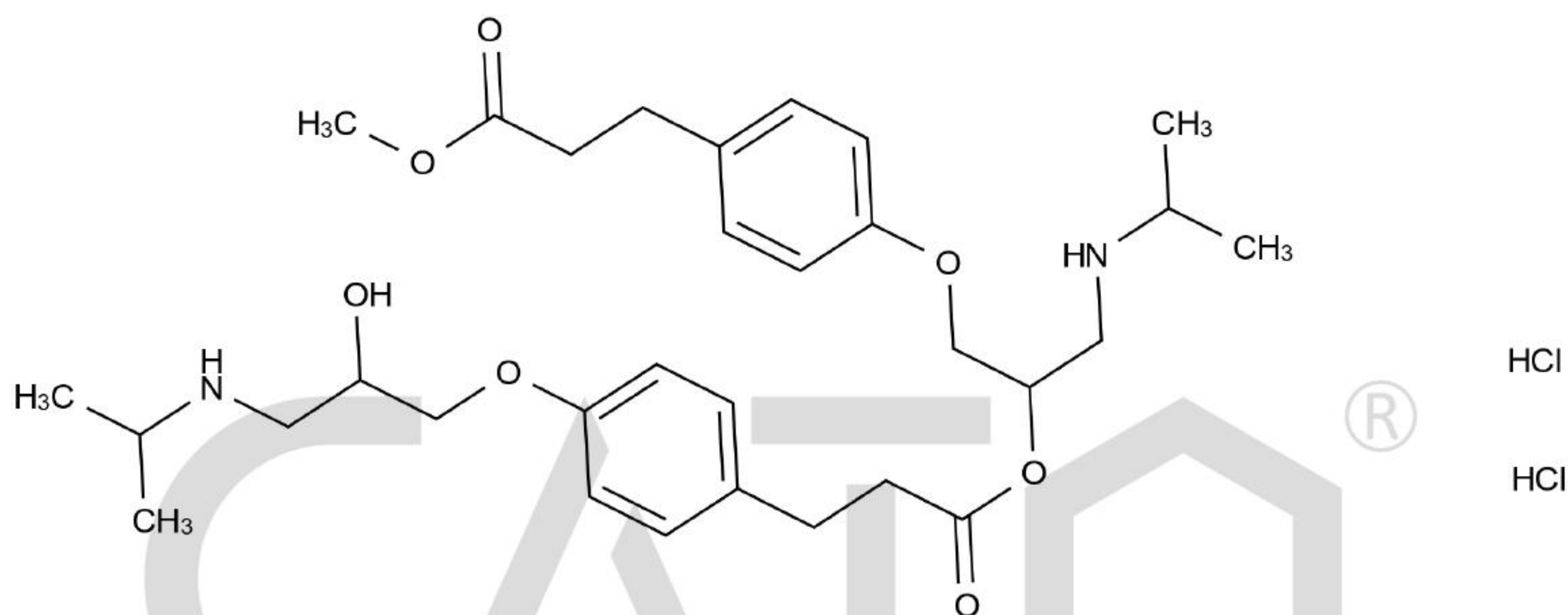


Certificate of Analysis

Reference Material & Standard

Product Name:	Esmolol Impurity 28 DiHCl	Catalogue Number:	C4X-189128
Synonyms:	N/A	Lot Number:	0331-RG-0092
CAS Number:	N/A	Expiry Date:	Feb 19, 2028
Molecular Formula:	C ₃₁ H ₄₆ N ₂ O ₇ 2*HCl	Storage:	2°C ~ 8°C Protected from light and Sealed
Molecular Weight:	558.71 2*36.46		

Chemical Structure:



Test Items	Method	Results
Appearance	Visual inspection	White Solid
Identification	LCMS&HNMR	Confirmed
Purity	HPLC	98.882%
Loss On Drying	TGA	0.44%
Assay		98.4%

Comment:

The calculation of the 100% method follows the formula (calculated on the non-dried basis):

Assay (%) = (100% - Loss On Drying) * Purity HPLC (%) / 100%

Loss On Drying is considered as absolute effect, HPLC purity is considered as relative effect.

Signature:

Prepared by:

Lily

Reviewed by:

Lisa

Approved by General Manager:

David

Date: Apr 10, 2025

Date: Apr 10, 2025

Date: Apr 10, 2025

