CERTIFICATE OF ANALYSIS

(Certificate No. KMB009023-01)

Release Date: 08/07/2026 **Re-test Date:** 07/07/2029

Bisoprolol Impurity L

Identification

Chemical Name :
4-(2-hydroxy-3-(isopropylamino)propoxy)benzaldehyde Hydrochloride (as per EP)

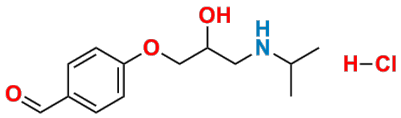
Alt. Name : Metoprolol EP Impurity C

CAT No. : KMB009023

CAS No. : 1956321-87-1 ; 29122-74-5 (Freebase)

Molecular Formula : C13H19NO3 : HCl

Molecular Weight : 237.3 : 36.5



Analytical Information

Batch No. : B009023-136-069

Description : Yellow Hygroscopic Solid

HPLC Purity : 99.58 %

Weight Loss By TGA : 2.99 %

% Potency : 96.6 %

Solubility : Water

Mass : Confirm

IR : Confirm

1H NMR : Confirm

Additional Information

Long Term Storage : Store at 2-8 deg. C for long term storage

Shipping Condition : Product is stable to be Shipped at Room Temperature

% Potency = [100 - 2.99(Weight Loss By TGA)] x [99.58(HPLC Purity)]/100 = 96.6 %

Recommendation : Released

	Department	Name	Signature	Date
Prepared By	Analytical	Jignesh Patel		08/07/2026
Reviewed & Approved By	Quality Control	Jatin Patel		08/07/2026

Attachments : COA, HPLC, MASS, 1HNMR, IR and TGA