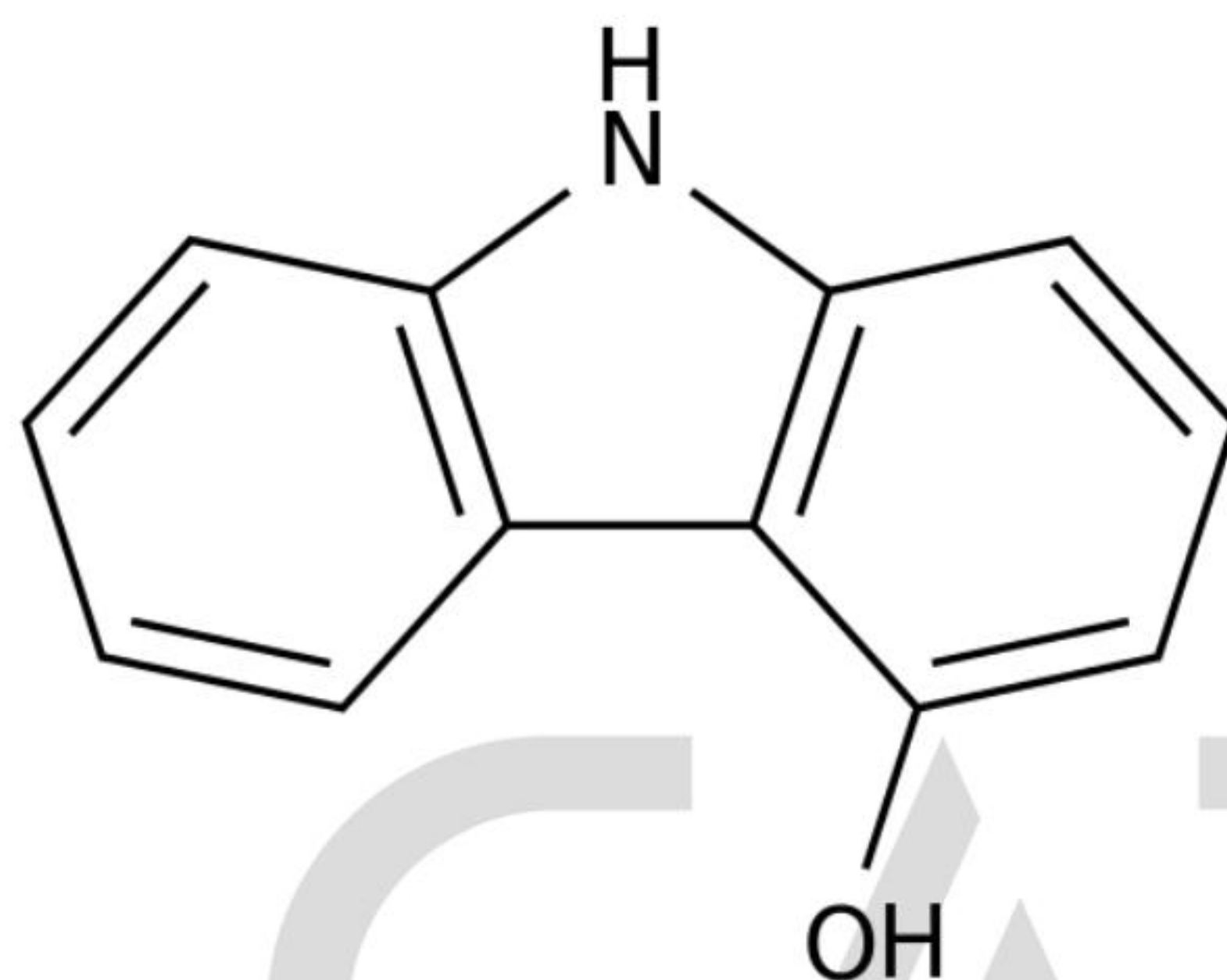


Certificate of Analysis

Reference Material

Product Name:	Carvedilol impurity 15	Catalogue Number:	C4X-157415
Chemical Name:	N/A	Lot Number:	0708-RD-0041
CAS Number:	52602-39-8	Expiry Date:	Jul 17, 2025
Molecular Formula:	C ₁₂ H ₉ NO	Storage:	2°C ~ 8°C Protected from light and Sealed
Molecular Weight:	183.21		

Chemical Structure:



Test Items	Method	Results
Appearance	Visual inspection	White to Off-White Powder
Identification	LCMS&HNMR	Confirmed
Purity	HPLC	99.148%
Loss On Drying	TGA	0.0080%
Assay		99.1%

Comment:

The calculation of the 100% method follows the formula:

$\text{Assay (\%)} = (100\% - \text{Loss On Drying}) * \text{Purity HPLC (\%)} / 100\%$

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

Signature:

Prepared by:

Debia

Reviewed by:

Hinlam

Aporoved by General manager:

David

Date: Jul 18, 2022

Date: Jul 19, 2022

Date: Jul 19, 2022

