

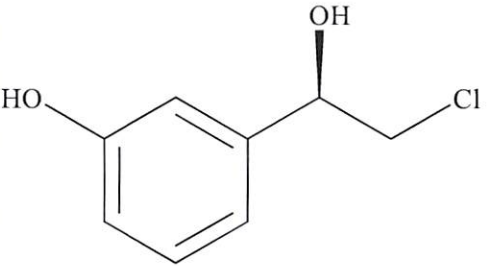
Certificate of Analysis

Certificate No.: **20240403013**



Date: April 3, 2024

Retest date: March 30, 2027

Compound Name: Phenylephrine Impurity 42	
Synonyms:	(R)-3-(2-chloro-1-hydroxyethyl)phenol
TLC Catalogue Number:	P-2668
CAS Number:	925430-39-3
Molecular Weight:	172.61
Molecular Formula:	C ₈ H ₉ ClO ₂
Source:	TLC Pharmaceutical Standards
Source Lot No.:	6187-012A2
Storage Conditions:	Store at 2-8 °C
Solubility:	Methanol, DMSO, Acetonitrile, DMF, Ethanol



Test Description	Specifications	Results
Visual Description	White to off-white solid	Conforms
Identification		
IR	Conforms to structure	Conforms
MS	Conforms to structure	Conforms
¹ H NMR	Conforms to structure	Conforms
Purity (HPLC)	Not less than 95.0%	98.9%
Impurity (HPLC)	RT 1.43, 0.21%; RT 5.21, 0.30%; RT 6.66, 0.26%	
Purity (Chiral HPLC)	Not less than 98.0%	99.4%
Water Content (KF)	N/A	3.5%
Optical Rotation	N/A	$[\alpha]_D^{25.0}(c=0.46, CH_3OH): -34.9^\circ$
Residual Solvents (NMR)	0.2% ethyl acetate, 0.1% diethyl ether and 0.3% dimethylformamide	
Assay (%)	Not less than 90.0%	94.3%
Recommendation:	Release.	

Name	Department	Signature	Date
Reviewed and approved by:	Quality Control		04/10/2024
Approved by:	Quality Assurance		04/10/2024

Attachments: HPLC, IR, MS and NMR spectra.