

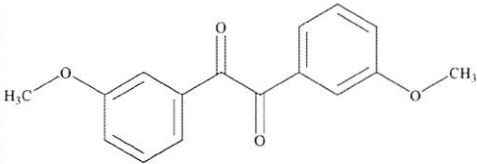


Certificate of Analysis

Certificate No.: 20220329014

Date: March 29, 2022

Retest date: March 17, 2025

Compound Name:	Formoterol Impurity 36	
Synonyms:	1,2-bis(3-methoxyphenyl)ethane-1,2-dione	
TLC Catalogue Number:	F-1161	
CAS Number:	40101-17-5	
Molecular Weight:	270.28	
Molecular Formula:	C ₁₆ H ₁₄ O ₄	
Source:	TLC Pharmaceutical Standards	
Source Lot No.:	4927-029A1	
Storage Conditions:	Store at 2-8 °C	
Solubility:	Methanol, DMSO, DMF, Acetonitrile	

Test Description	Specifications	Results
Visual Description	Pale yellow solid	Conforms
Identification		
IR	Conforms to structure	Conforms
MS	Conforms to structure	Conforms
¹H NMR	Conforms to structure	Conforms
Purity (HPLC)	Not less than 95.0%	100.0%
Impurity (HPLC)	N/A	
Water Content (KF)	N/A	0.1%
Residual Solvents (NMR)	0.4% ethanol	
Assay (%)	Not less than 90.0%	99.5%
Recommendation:	Release.	

Name	Department	Signature	Date
Reviewed and approved by:	Quality Control		03/30/2022
Approved by:	Quality Assurance		03/30/2022

Attachments: HPLC, IR, MS and NMR spectra.