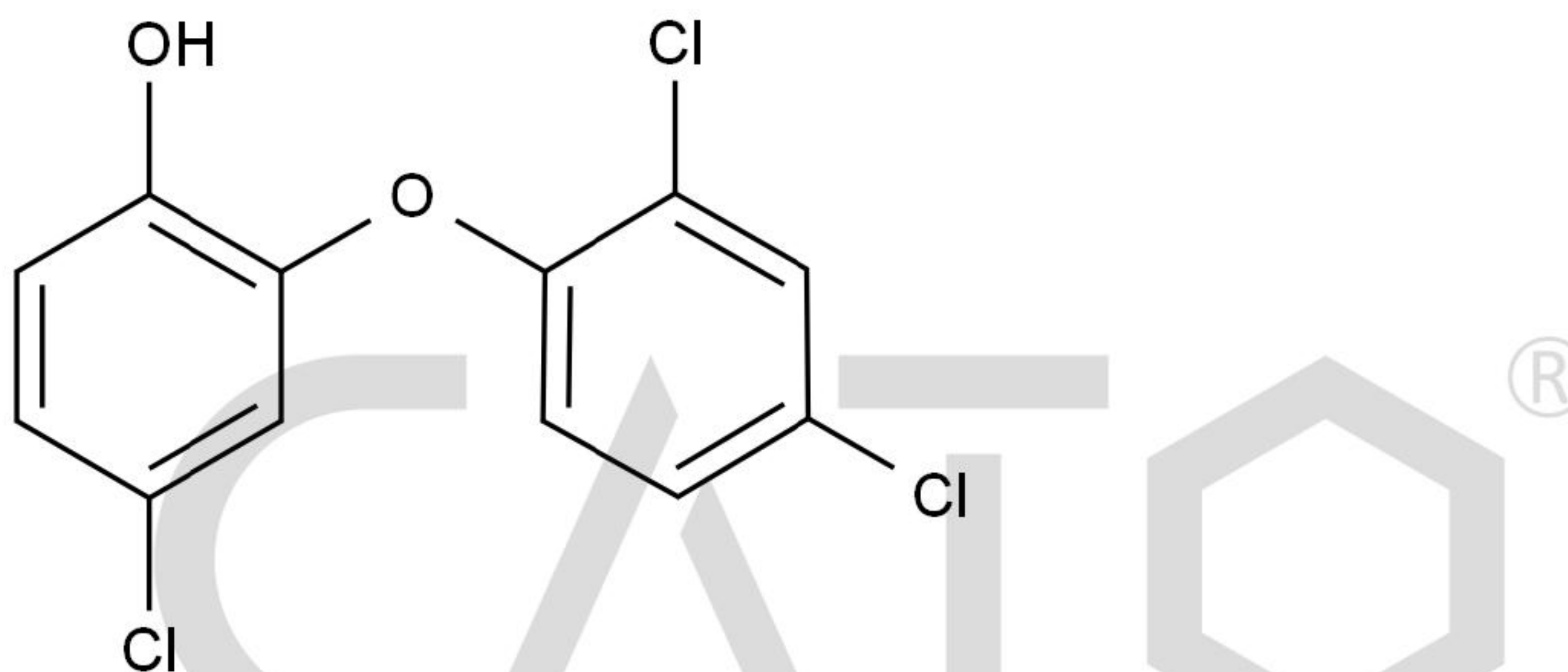


Certificate of Analysis

Reference Material & Standard

Product Name:	Ketoconazole Impurity 23	Catalogue Number:	C4X-147223
Synonyms:	N/A	Lot Number:	1205-RG-0038
CAS Number:	29098-85-9	Expiry Date:	Sep 15, 2029
Molecular Formula:	C ₁₂ H ₇ Cl ₃ O ₂	Storage:	2°C ~ 8°C Protected from light and Sealed
Molecular Weight:	289.54	Shipping Condition:	Shipping at Room Temperature

Chemical Structure:



Test Items	Method	Results
Appearance	Visual inspection	Pale Yellow Liquid
Identification	LCMS&IR&HNMR	Confirmed
Purity	HPLC	99.2753%
Water Content	Karl Fischer	0.30%
Residual Solvents	NMR	0.8% ethyl acetate
Assay		98.2%

Comment:

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

Assay (%) = (100% - Water Content - Residual Solvents) * Purity HPLC (%) / 100%

Water Content and Residual Solvents are considered as absolute effect, HPLC purity is considered as relative effect.

Signature:

Prepared by:

Reviewed by:

Approved by General Manager:

Date: Dec 08, 2025

Date: Dec 08, 2025

Date: Dec 08, 2025



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