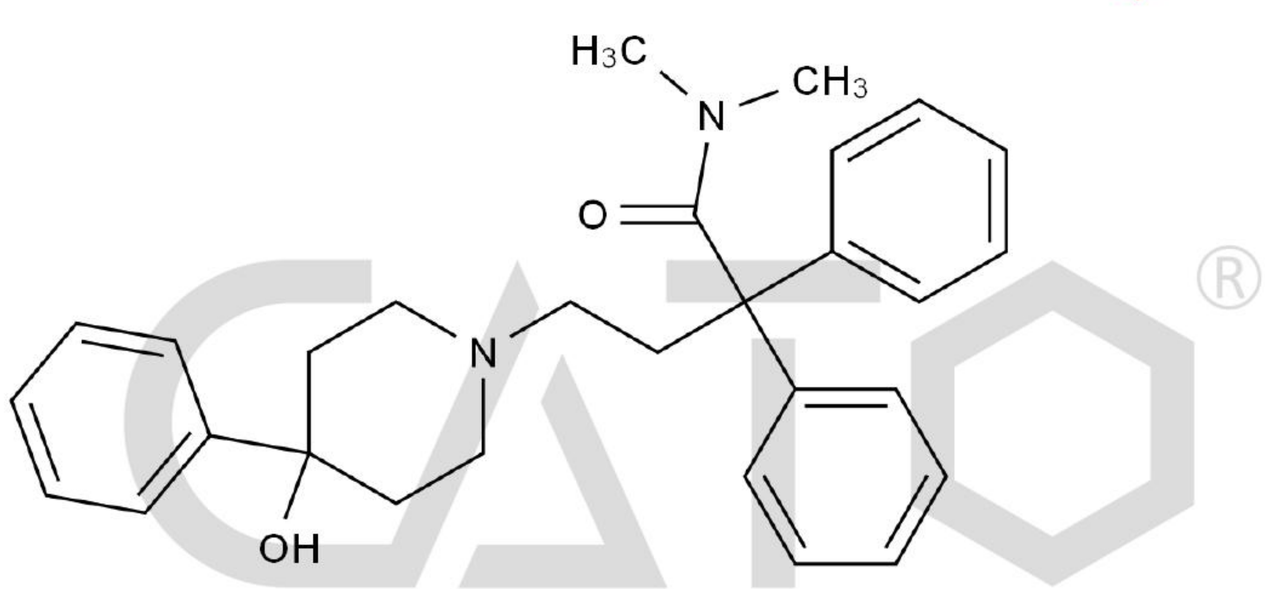
Certificate of Analysis

Reference Material & Standard

Product Name:	Loperamide EP Impurity D	**Catalogue Number:**	CP135239
Synonyms:	N/A	**Lot Number:**	0824-RE-0068
CAS Number:	37743-41-2	**Expiry Date:**	Sep 08, 2030
Molecular Formula:	$C_{29}H_{34}N_2O_2$	**Storage:**	2°C ~ 8°C Protected from light and Sealed
Molecular Weight:	442.59	**Shipping Condition:**	Shipping at Room Temperature
		Warning:	

Chemical Structure:



Test Items	Method	Results
Appearance	Visual inspection	White Solid
Identification	LCMS&HNMR	Confirmed
Purity	HPLC	97.6434%
Loss on Drying	TGA	3.025%
Assay		94.7%

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Comment:

The calculation of the mass balance method follows the formula (calculated on the non-dried basis):
*Assay (%) = (100%-Loss on Drying) * Purity HPLC (%) /100%*
Loss on Drying is considered as absolute effect, HPLC purity is considered as relative effect.

Signature:

Prepared by: Koji Date: Sep 09, 2026

Reviewed by: Lisa Date: Sep 09, 2026

Approved by General Manager: David Date: Sep 09, 2026

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