



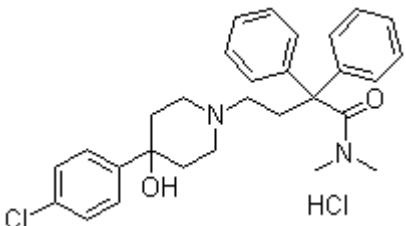
HANGZHOU DINGYAN CHEM CO.,LTD

TEL: 86-571-87157530,86465881,88025800, FAX:86-571-87156470

E-Mail:sales@dingyanchem.com,Web: www.dingyanchem.com

CERTIFICATE OF ANALYSIS

NO: **DYC081805021**

Product name	loperamide hydrochloride (USP32)
CAS Number	34552-83-5
Molecule Structure	 The chemical structure shows a piperazine ring substituted with a 4-chlorophenyl group and a hydroxyl group. The nitrogen of the piperazine ring is connected to a propyl chain, which is further substituted with a dimethylamino group and a diphenylmethyl group. The hydrochloride salt is indicated as HCl.
Molecule Formula	C ₂₉ H ₃₄ ClN ₂ O ₂
Batch number	20180131
Manuf&Exp. Date	2018-01-31
Testing date	2018-01-31

Items	Standard	Result
DESCRIPTION	WHITE TO SLIGHTLY YELLOW POWDER	CONFORMS
SOLUBILITY	FREELY SOLUBLE IN METHANOL AND IN CHLOROFORM; SLIGHTLY SOLUBLE IN WATER AND IN DILUTE ACIDS; VERY SLIGHTLY SOLUBLE IN ISOPROPYL ALCOHOL	CONFORMS
IDENTIFICATION	IR, UV	CONFORMS
MELTING POINT	ABOUT 225°C	226.5°C
LOSS ON DRYING	NOT MORE THAN 0.5%	0.11%
RESIDUE ON IGNITION	NOT MORE THAN 0.2%	0.04%
HEAVY METALS	NOT MORE THAN 0.002%	<0.002%
CHROMATOGRAPHIC PURITY (TLC)	NO SECONDARY SPOTS ARE OBSERVED	CONFORMS
CHLORIDE CONTENT	13.52% ~ 14.20%	13.99%
RESIDUAL SOLVENTS	METHANOL: NOT MORE THAN 3000PPM ACETONE: NOT MORE THAN 5000PPM METHYLENE DICHLORIDE: NOT MORE THAN 600PPM	NOT DETECTED 434PPM 159PPM
ASSAY (ON DRIED BASIS)	98.0% ~ 102.0% (C ₂₉ H ₃₃ ClN ₂ O ₂ • HCl)	99.9%
Conclusion	The products complies with standard USP32	

Hangzhou Dingyan Chem Co., Ltd.
QUALITY CONTROL: *Cristina*
Quality Control
Signature(s)

CHECK: 姚仙娟

INSPECTOR: 刘清风

Add: Xiasha 571,19TH Street E-COMMERCE 4A601-602, Jianggan Area, Hangzhou, China