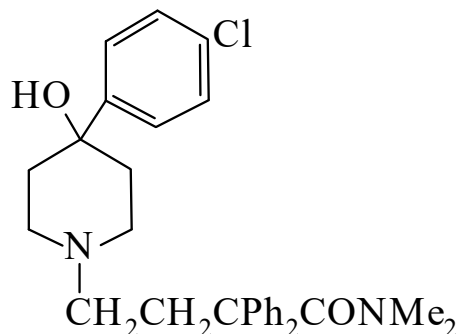




>>Entry Name: Loperamide, BAN, INN, JAN

Synonym(s): 4-(4-Chlorophenyl)-4-hydroxy-*N,N*-dimethyl- $\alpha,\alpha$ -diphenyl-1-piperidinebutanamide, 9Cl. Imodium. Many other names



CAS Registry Number: 53179-11-6

Related CAS Registry Numbers(s): 109572-89-6

Molecular Formula:  $C_{29}H_{33}ClN_2O_2$

Molecular Weight: 477.045

Accurate Mass: 476.223055

Percentage Composition: C 73.02%; H 6.97%; Cl 7.43%; N 5.87%; O 6.71%

Use/Importance: Antiperistaltic, antidiarrhoeal

Calculated Log P Data: Log P 3.9 (uncertain value) (calc)

>>Derivative: Hydrochloride

Synonym(s): Loperamide hydrochloride, USAN

CAS Registry Number: 34552-83-5

Physical Description: Cryst. (2-propanol)

Melting Point: Mp 222-223°

Solubility: Insol.  $H_2O$

Hazard & Toxicity: LD<sub>50</sub> (rat, orl) 185 mg/kg. Exp. reprod. effects

Sigma: L4762

>>Derivative: *N*<sup>4</sup>-Oxide

Synonym(s): Loperamide oxide, BAN, INN. R 58425

CAS Registry Number: 106900-12-3

Molecular Formula:  $C_{29}H_{33}ClN_2O_3$

Molecular Weight: 493.044

Accurate Mass: 492.21797

Percentage Composition: C 70.65%; H 6.75%; Cl 7.19%; N 5.68%; O 9.74%

Use/Importance: Antidiarrhoeal

Melting Point: Mp 149.7°

Calculated Log P Data: Log P 1.58 (uncertain value) (calc)

Other Data: Prodrug of loperamide. Has *trans*-N-oxide-OH config.

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