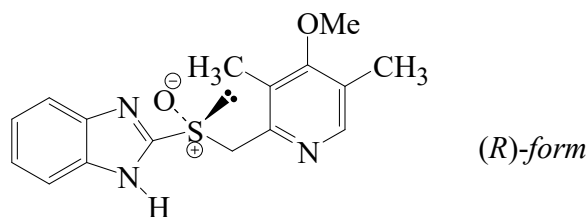




>>Entry Name: Omeprazole, BAN, INN, JAN, USAN

Synonym(s): 5-Methoxy-2-[[[(4-methoxy-3,5-dimethyl-2-pyridinyl)methyl]sulfinyl]benzimidazole, 9Cl. Antra. Audazol. Belmazol. Gastroloc. Logastric. Losec. Mepral. Mopral. Omapren. Omeprazen. Parizac. Prilosec. Zoltum. H 168/68. Many other names



CAS Registry Number: 73590-58-6

Molecular Formula: C<sub>17</sub>H<sub>19</sub>N<sub>3</sub>O<sub>3</sub>S

Molecular Weight: 345.421

Accurate Mass: 345.114712

Percentage Composition: C 59.11%; H 5.54%; N 12.16%; O 13.90%; S 9.28%

Biological Use/Importance: Proton pump inhibitor, inhibits gastric acid secretion. Antiulcer agent. Used in combination with Amoxicillin [CKX85-Z](#) for eradication of *Helicobacter pylori*

Development Status: Marketed drug. Launched 1988. Worldwide best selling prescription drug (\$6.3 bn) (AstraZeneca) (2000, Pharma Business)

Hazard & Toxicity: LD<sub>50</sub> (rat, orl) 2210 mg/kg. LD<sub>50</sub> (rat, ipr) >100 mg/kg

Sigma: O8882

>>Variant: (R)-form

CAS Registry Number: 119141-89-8

Molecular Formula: C<sub>17</sub>H<sub>19</sub>N<sub>3</sub>O<sub>3</sub>S

Molecular Weight: 345.421

Accurate Mass: 345.114712

Percentage Composition: C 59.11%; H 5.54%; N 12.16%; O 13.90%; S 9.28%

Optical Rotation: [α]<sub>D</sub><sup>20</sup> +181.5 (c, 0.5 in CHCl<sub>3</sub>)

>>Variant: (S)-form

Synonym(s): Esomeprazole, INN

CAS Registry Number: 119141-88-7

Molecular Formula: C<sub>17</sub>H<sub>19</sub>N<sub>3</sub>O<sub>3</sub>S

Molecular Weight: 345.421

Accurate Mass: 345.114712

Percentage Composition: C 59.11%; H 5.54%; N 12.16%; O 13.90%; S 9.28%

Other Data: Pharmacol. active isomer

>>Variant: (±)-form

CAS Registry Number: 131959-78-9

Molecular Formula: C<sub>17</sub>H<sub>19</sub>N<sub>3</sub>O<sub>3</sub>S

Molecular Weight: 345.421

Accurate Mass: 345.114712

Percentage Composition: C 59.11%; H 5.54%; N 12.16%; O 13.90%; S 9.28%

Melting Point: Mp 156°

Calculated Log P Data: Log P 2.53 (uncertain value) (calc)

>>Derivative: Na salt

Synonym(s): Omeprazole sodium, USAN

CAS Registry Number: 95510-70-6

References: