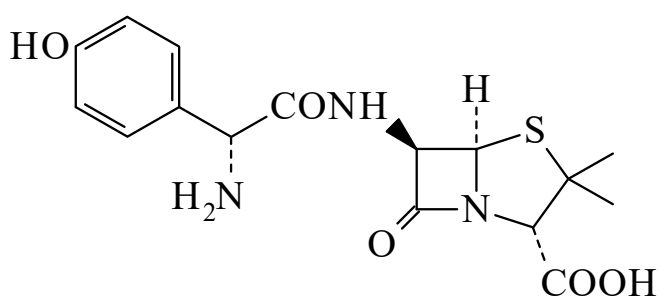




>> **Name:** Amoxicillin, INN, JAN, USAN

ENTRY UNDER REVIEW

Synonym(s): 6-[[Amino(4-hydroxyphenyl)acetyl]amino]-3,3-dimethyl-7-oxo-4-thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid, 9CI. 6-(α -Amino-4-hydroxyphenylacetamido)penicillanic acid. **Amoxycillin**, BAN. *p*-Hydroxyampicillin. Clamoxyl (SKB). Amoxil. BRL 2333. Cemoxin. Imacillin. Sauracillin



CAS Registry Number: 26787-78-0

Related CAS Registry Numbers(s): 79198-29-1

Extra CAS Registry Numbers(s): 61336-70-7

Molecular Formula: C₁₆H₁₉N₃O₅S

Molecular Weight: 365.409

Accurate Mass: 365.104542

Percentage Composition: C 52.59%; H 5.24%; N 11.50%; O 21.89%; S 8.78%

Source/Synthesis: Semisynthetic penicillin

Use/Importance: Active against gram-positive and -negative bacteria. Antibacterial activity v. similar to Ampicillin but superior oral absorption. Used in combination therapy with Clavulanic acid [BDT79-Y](#)

Physical Description: Cryst. +3H₂O

Development Status: Worldwide 98th best selling prescription drug (\$0.37 bn) (SmithKline Beecham) (1997, Pharma Business)

Optical Rotation: [α]_D²⁰+246 (c, 0.1 in H₂O)

Solubility: Sol. H₂O

Calculated Log P Data: Log P -1.94 (uncertain value) (calc)

Hazard & Toxicity: Hypersensitivity reactions and gastrointestinal effects reported when used therapeutically. LD₅₀ (rat, ipr) 2870 mg/kg (trihydrate)

Fluka: 10039

Sigma: A8523

>>**Derivative:** Na salt

Synonym(s): Amoxicillin sodium, USAN

CAS Registry Number: 34642-77-8

Other Data: Used in combination with clavulanate potassium and marketed as Augmentin

>>**Derivative:** 2-Naphthalenesulfonate

Melting Point: Mp 194 dec.°

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