



**Optical Rotation:**  $[\alpha]_D^{25} +238$

**Solubility:** Sol. H<sub>2</sub>O

**Other Data:** Deriv. with good org. solv. solubility, useful for isol.

>>Derivative: Benzyl(phenethyl)ammonium salt (1:1)

**Synonym(s): Benethamine penicillin**, BAN, INN. Propen. Triplopen

**CAS Registry Number:** 751-84-8

**Biological Use/Importance:** Antibiotic

**Melting Point:** Mp 146-147°

**Hazard & Toxicity:** LD<sub>50</sub> (rat, ivn) 122 mg/kg

>>Derivative: *N,N*-Dibenzylethylenediammonium salt (2:1)

**Synonym(s): Benzathine penicillin**, BAN. Benzathine benzylpenicillin, INN. Penicillin G benzathine, USAN. Benzylpenicillin benzathine, JAN. Benzetacil. Benzethacil. Bicillin. Permapen. Benzacillin. Debecillin. Extencilline

**CAS Registry Number:** 1538-09-6

**Physical Description:** Cryst. + H<sub>2</sub>O

**Melting Point:** Mp 123-124°

**Optical Rotation:**  $[\alpha]_D^{25} +206$  (formamide)

**Hazard & Toxicity:** LD<sub>50</sub> (mus, orl) 2000 mg/kg. Exp. reprod. effects

**Sigma:** B2257

>>Derivative: 2,5-Diphenylpiperazine salt

**Synonym(s): Phenyracillin**, INN. Fenyracilline

**CAS Registry Number:** 7009-88-3

**Melting Point:** Mp 219°

**Optical Rotation:**  $[\alpha]_D +212$  (*N*-methylformamide)

**Hazard & Toxicity:** LD<sub>50</sub> (mus, ipr) 450 mg/kg

>>Derivative: *N,N*-Bis(dehydroabietyl)ethylenediamine salt (2:1)

**Synonym(s): Hydrabamine penicillin**. Compocillin

**CAS Registry Number:** 3344-16-9

**Biological Use/Importance:** Antibiotic

**Physical Description:** Cryst. (MeOH aq.)

**Optical Rotation:**  $[\alpha]_D^{25} +115.3$  (c, 10 in CHCl<sub>3</sub>)

**Other Data:** Dec. at 171-173°

>>Derivative: 1,1-Diphenylmethylaniline salt (1:1)

**Synonym(s): Benzhydrylamine penicillin**. Orencil. Penidryl

**CAS Registry Number:** 1538-11-0

**Biological Use/Importance:** Antibiotic

**Physical Description:** Cryst. (Me<sub>2</sub>CO aq.)

**Melting Point:** Mp 159°

**Optical Rotation:**  $[\alpha]_D^{20} +206$  (c, 1 in H<sub>2</sub>O)

**Hazard & Toxicity:** LD<sub>50</sub> (rat, ipr) 200 mg/kg

>>Derivative: Me ester

**Physical Description:** Needles (EtOAc/hexane)

**Melting Point:** Mp 97-98°

**Optical Rotation:**  $[\alpha]_D +286$  (CHCl<sub>3</sub>)

>>Derivative: Benzyl ester

**Physical Description:** Oil

**Optical Rotation:**  $[\alpha]$