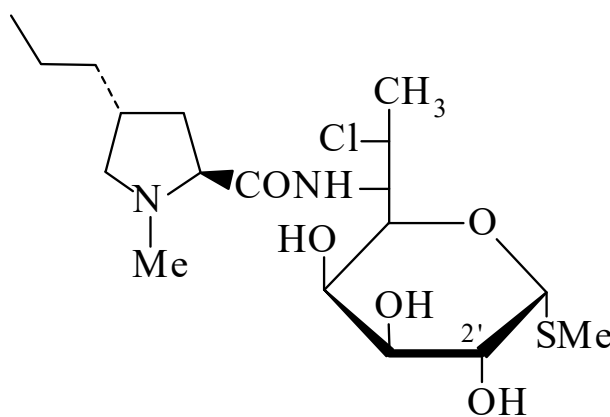




>>Entry Name: **Clindamycin**, BAN, INN, JAN, USAN

**Synonym(s):** 7-Chloro-7-deoxylincomycin. Aclinda. Basocin. Cleocin. Cleocin T. Clinda. ClindaDerm. ClindaHexal. Clindatech. **Clinimycin**‡. C/T/S. Dalacin C. Dalacin T. Klindamycin. Klinicin. Lanacine. Sobelin. Turimycin. U 21251. Antibiotic U 21251. Many other names



**CAS Registry Number:** 18323-44-9

**Related CAS Registry Numbers(s):** 36688-78-5

**Molecular Formula:** C<sub>18</sub>H<sub>33</sub>ClN<sub>2</sub>O<sub>5</sub>S

**Molecular Weight:** 424.988

**Accurate Mass:** 424.17987

**Percentage Composition:** C 50.87%; H 7.83%; Cl 8.34%; N 6.59%; O 18.82%; S 7.55%

**Source/Synthesis:** Semisynthetic

**Biological Use/Importance:** Broad spectrum antibiotic. Used in the treatment of acne

**Development Status:** Marketed drug. Approved for pharmaceutical use 1992

**Optical Rotation:** [ $\alpha$ ]<sub>D</sub> +214 (CHCl<sub>3</sub>)

**Calculated Log P Data:** Log P 1.02 (uncertain value) (calc)

**Hazard & Toxicity:** Gastrointestinal disturbances, hypersensitivity reactions and hepatic effects reported when used therapeutically. LD<sub>50</sub> (rat, scu) 2618 mg/kg

>>Derivative: Hydrochloride

**Synonym(s):** **Clindamycin hydrochloride**, USAN. Dalactine

**CAS Registry Number:** 21462-39-5

**Physical Description:** Cryst. (EtOH/EtOAc)

**Melting Point:** Mp 141-143°

**Optical Rotation:** [ $\alpha$ ]<sub>D</sub> +144 (H<sub>2</sub>O)

**Hazard & Toxicity:** LD<sub>50</sub> (rat, orl) 2193 mg/kg

**Fluka:** 27543

**Sigma:** C5269

>>Derivative: O<sup>2</sup>-Phosphate

**Synonym(s):** **Clindamycin phosphate**, USAN. U 28508

**CAS Registry Number:** 24729-96-2

**Molecular Formula:** C<sub>18</sub>H<sub>34</sub>ClN<sub>2</sub>O<sub>8</sub>PS

**Molecular Weight:** 504.968

**Accurate Mass:** 504.146202

**Percentage Composition:** C 42.81%; H 6.79%; Cl 7.02%; N 5.55%; O 25.35%; P 6.13%; S 6.35%

**Melting Point:** Mp 109-114°

**Hazard & Toxicity:** Cardiotoxic effects reported when used intravenously. LD<sub>50</sub> (rat, scu) 3861 mg/kg; LD<sub>50</sub> (rat, orl) 1832 mg/kg. Exp. reprod. and teratogenic effects

**Sigma:** C8411

>>Derivative: 2'-Hexadecanoate; hydrochloride

**Synonym(s):** **Clindamycin palmitate hydrochloride**, USAN

**CAS Registry Number:** 25507-04-4

**Hazard & Toxicity:** LD<sub>50</sub> (rat, scu) 2000 mg/kg