

CHEMICAL PROPERTIES

Colorless, crystalline solid²

Molecular Weight: 510.3²

Solubility: Greater than 100mg./ml. of water at room temperature.³

Stability: Highly resistant (13 times more so than penicillin G) to inactivation by acid. Also resistant to inactivation by staphylococcal beta-lactamase.^{1,4,5}

Activity Remaining in Per Cent Under Varying Conditions²

Time (days)	Temperature	
	24°C	4°C
2	100	
9	30	
14		90.9

1 mg. of pure sodium salt monohydrate equals 1164 penicillin units;
0.8591 mcg. equals one unit.³

EXCRETION

Renal clearance, about 200 ml. per minute, is considerably less than that of penicillin G which approximates total renal blood flow (500ml. per minute). No detectable accumulation occurs though, even at doses of 250 mg. or 500 mg. every six hours.

TOXICITY

Acute: No deaths in rats, rabbits, or dogs given single oral doses of 8000, 5000, 3000 mg./kg. respectively. LD₅₀ for mice, 8700 mg./kg.
Chronic: No adverse effects in dogs given oral doses as high as 500 mg./kg./day or rats given 1000 mg./kg./day for three months. No deaths occurred in dogs and the same number occurred in treated as in control rats.