

**Chloramphenicol,100G****PG-0320100G**

Chloramphenicol is a broad-spectrum antibiotic originally derived from *Streptomyces venezuelae* and now commonly produced synthetically. It is effective against a wide range of Gram-positive and Gram-negative bacteria by inhibiting bacterial protein synthesis. Chloramphenicol is widely used in microbiology laboratories, selective culture media, and certain pharmaceutical preparations, especially eye and ear medications. Due to potential serious side effects such as bone marrow suppression and aplastic anemia, its medical use is carefully controlled in many countries. In laboratories, it is commonly used as a selective antibiotic in bacterial culture and molecular biology applications.

<b>Parameter</b>	<b>Details</b>
<b>Product Name</b>	Chloramphenicol
<b>Description</b>	Broad-spectrum antibiotic used in microbiology and pharmaceutical applications
<b>Appearance</b>	White to grayish-white crystalline powder
<b>Formula</b>	$C_{11}H_{12}Cl_2N_2O_5$
<b>Solubility</b>	Slightly soluble in water; soluble in ethanol and methanol
<b>pH (1% Solution)</b>	Approximately 4.5–7.5 (depending on solution concentration)
<b>CAS Number</b>	56-75-7
<b>Storage Condition</b>	Store in a cool, dry place in a tightly closed container protected from light
<b>Applications / Uses</b>	Antibacterial agent, microbiological selective media, pharmaceutical research, molecular biology

**Safety**

Chloramphenicol should be handled with care as it can be harmful if inhaled, swallowed, or in contact with skin. It may cause irritation and, with prolonged exposure, can affect blood formation. Always use gloves, a lab coat, and goggles while handling it, avoid dust formation, and store it in a cool, dry, tightly closed container.