

Cetyl Trimethyl Ammonium Bromide**PG-3380-500G**

Cetyl Trimethyl Ammonium Bromide (CTAB) is a high-purity cationic surfactant widely used in molecular biology, biochemistry, microbiology, and analytical laboratories. It is commonly employed for DNA and RNA extraction, membrane solubilization, nanoparticle synthesis, and as a detergent in various research and industrial applications.

Parameter Specification

Product Name Cetyl Trimethyl Ammonium Bromide (CTAB)

Description High-purity cationic surfactant suitable for molecular biology, nucleic acid extraction, and biochemical research applications

Molecular Formula $C_{19}H_{42}BrN$

Molecular Weight 364.45 g/mol

Appearance White crystalline powder

Purity $\geq 99\%$

Solubility Soluble in water and alcohol

Melting Point 240–250°C (decomposition)

CAS Number 57-09-0

pH (1% Solution) 5.0–8.0

Loss on Drying $\leq 1.0\%$

Storage Condition Store at room temperature in a tightly closed container. Protect from moisture and direct sunlight.

Safety

Harmful if inhaled, swallowed, or absorbed through skin. Suspected carcinogen. May cause liver, kidney, and central nervous system damage following prolonged or repeated exposure. Use in a well-ventilated area and wear appropriate PPE including gloves, lab coat, and safety goggles. Avoid contact with skin, eyes, and clothing. Store away from heat and incompatible materials.