

## Hexadecyltrimethylammonium bromide

CAS Number: 57-09-0

Storage Temperature: Room Temperature

Product Number: C8440(From Amresco 0833)

### Product Description

Appearance: Fine white crystalline powder    Molecular formula:  $C_{19}H_{42}BrN$     Molecular weight: 364.5

This product is designated as High Purity Grade and is suitable for use in DNA precipitation. It has been analyzed for the absence of nucleases.

Hexadecyltrimethylammonium bromide (CTAB) is a bactericidal, cationic detergent. Its activity is neutralized by soaps and anionic detergents, such as sodium dodecyl sulfate (SDS). Trimethylammonium bromide compounds form insoluble complexes with SDS. CTAB is active at alkaline pH against both Gram positive and Gram negative organisms.

CTAB has been used for the isolation of plant high molecular weight DNA (by a rapid method) as well as plant DNA for use in PCR analysis. It has been utilized to precipitate nucleic acids.

CTAB provides enhancement of Concanavalin A mediated agglutination. It has been used for the determination of protein molecular weights in electrophoretic systems and for the CMC determination of detergents. CTAB has also been utilized as a titrant for potentiometric titration of perchlorate and as a phase-transfer catalyst in reduction of arenes and heterocyclic compounds.

### Preparation Instructions

The product is soluble in water (100 mg/ml). It is freely soluble in alcohol; sparingly soluble in acetone. It is practically insoluble in ether and benzene.

### Storage/Stability

The product is stable in acid solution.