

# MATERIAL SAFETY DATA SHEET

MSDS No.: FAD20C  
Revision Date: March 23, 2010  
Approved by: James A. Bertsch

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## Section 1 Chemical Product and Company Information

<b>Product</b>	<b>ACID DETERGENT SOLUTION, POWDER</b>
<b>Synonyms</b>	Cetyltrimethylammonium Bromide; Cetrionium Bromide; CTAB

CHEMTREC 24 Hour Emergency Phone Number (800) 424-9300

## Section 2 Hazards Identification

Emergency Overview

**WARNING!**  
TOXIC. IRRITANT. SEVERE EYE IRRITATION. RISK OF SERIOUS DAMAGE TO EYES. MAY CAUSE SENSITIZATION BY SKIN CONTACT. HYGROSCOPIC. Use with adequate ventilation. Avoid contact with skin, eyes and clothing. Store in a cool, dry place. Wash thoroughly after handling.  
Target organs: None known.

0 = Minimal  
1 = Slight  
2 = Moderate  
3 = Serious  
4 = Severe

<b>Health</b>	2
<b>Fire</b>	1
<b>Reactivity</b>	1
<b>Contact</b>	2

HMIS \*

## Section 3 Composition / Information on Ingredients

Chemical Name	CAS #	%	TLV Units (ACGIH 2001)
Cetyltrimethylammonium bromide	57-09-0	100%	None established.

## Section 4 First Aid Measures

**INGESTION:** Call physician or Poison Control Center immediately. Induce vomiting only if advised by appropriate medical personnel. Never give anything by mouth to an unconscious person.

**INHALATION:** Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

**EYE CONTACT:** Check for and remove contact lenses. Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention.

**SKIN CONTACT:** Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention.

## Section 5 Fire Fighting Measures

**General information:** In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective gear. Fire or excessive heat may produce hazardous decomposition products to be produced as dust or fume. Use water spray to keep fire-exposed containers cool.

**Extinguishing Media:** Use any media suitable for extinguishing supporting fire.

**Flash Point:** 244°C (471°F) Not flammable.

**Autoignition temperature:** N/A

**Explosion Limits: Lower:** N/A **Upper:** N/A

## Section 6 Accidental Release Measures

Evacuate personnel to safe area. Use proper personal protective equipment as indicated in Section 8. Provide adequate ventilation. Recover for use if not contaminated. Sweep or vacuum up and place in a suitable container for proper disposal. Wash spill area with soap and water. Avoid runoff into storm sewers and ditches which lead to waterways.

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## Section 7 Handling & Storage GENERAL STORAGE CODE GREEN

Read label on container before using. Do not wear contact lenses when working with chemicals. Keep container tightly closed. For laboratory use only. Not for drug, food or household use. Keep out of reach of children.

**Handling:** Use with adequate ventilation. Avoid contact with eyes, skin and clothing. Avoid ingestion. Do not inhale dusts. Wash thoroughly after handling. Remove and wash clothing before reuse.

**Storage:** Store in a cool, dry, well-ventilated area away from incompatible substances. Protect from moisture.

## Section 8 Exposure Controls / Personal Protection

**Engineering controls:** Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower and fire extinguishing material. Personnel should wear safety glasses, goggles, or faceshield, lab coat or apron, appropriate protective gloves. Use adequate ventilation to keep airborne concentrations low.

**Respiratory protection:** None should be needed in normal laboratory handling at room temperatures. If dusty conditions prevail, work in fume hood or wear a NIOSH/MSHA-approved respirator.

## Section 9 Physical & Chemical Properties

**Physical state:** Solid.

**Appearance:** White, to off-white powder.

**Odor:** No odor.

**pH:** N/A

**Vapor pressure (mm Hg):** N/A

**Vapor Density (Air = 1):** 13

**Evaporation rate (Butyl acetate = 1):** N/A

**Viscosity:** N/A

**Boiling point:** N/A

**Freezing / Melting point:** 230°C (446°F)

**Decomposition temperature:** N/A

**Solubility in water:** Soluble.

**Specific gravity (H<sub>2</sub>O = 1):** N/A

**Percent volatile (%):** N/A

**Molecular formula:** C<sub>19</sub>H<sub>42</sub>BrN

**Molecular weight:** 364.45

## Section 10 Stability & Reactivity

**Chemical stability:** Stable

**Hazardous polymerization:** Will not occur.

**Conditions to avoid:** Avoid contact with heat, sparks and open flames.

**Incompatibilities with other materials:** Strong oxidizers.

**Hazardous decomposition products:** Carbon oxides, nitrogen oxides, hydrogen bromide gas.

## Section 11 Toxicological Information

**Effects of overexposure:** Causes irritation to eyes. Risk of serious damage to eyes. May cause corneal injury. Avoid contact with eyes. Toxic in contact with skin. Irritating to skin. May cause sensitization by skin contact. Avoid contact with skin. Toxic by inhalation. Irritating to mucous membranes. Irritating to respiratory system. Toxic if swallowed. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Avoid repeated exposure. Exercise appropriate procedures to minimize potential hazards.

ORAL-RAT LD50: 410 mg/kg

## Section 12 Ecological Information

Contains no substances known to be hazardous to the environment or not degradable in waste water treatment plants.

## Section 13 Disposal Considerations

These disposal guidelines are intended for the disposal of catalog-size quantities only. Federal regulations may apply to empty container. State and/or local regulations may be different. Dispose of in accordance with all local, state and federal regulations or contract with a licensed chemical disposal agency.

## Section 14 Transport Information

**UN/NA number:** N/A

**Shipping name:** Not Regulated.

**Hazard class:** N/A

**Packing group:** N/A

**Exceptions:** N/A

## Section 15 Regulatory Information

TSCA-listed, EINECS-listed (200-311-3), DSL-listed.

## Section 16 Additional Information

The information contained herein is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. \* Hazardous Materials Industrial Standards.