

# MATERIAL SAFETY DATA SHEET

## Quaternary Ammonium

(Dimethyl Ammonium Chloride & Dimethyl Benzyl Ammonium Chloride)

### FIRST AID

**EYES:** FLUSH WITH LARGE AMOUNTS OF WATER FOR AT LEAST 15 MINUTES  
**SKIN:** REMOVE CONTAMINATED CLOTHING; WASH WITH SOAP AND WATER  
**INHALATION:** REMOVE FROM EXPOSURE  
**INGESTION:** DILUTE STOMACH CONTENTS WITH MILK OR WATER; DO NOT INDUCE VOMITING;  
CONTACT PHYSICIAN IMMEDIATELY

**HEALTH: 3**

**FLAMMABILITY: 1**

**REACTIVITY: 0**

**PRECAUTIONS: CORROSIVE**

### MANUFACTURER

Lonza Incorporated  
1717 Route 208  
Fair Lawn NJ 07410

### PHYSICAL DATA

volatile: 20% (by weight)  
viscosity: < 100 cps  
solubility: soluble in water  
flash point: 47°C  
appearance: yellow liquid  
freezing point: 20°C  
specific gravity: 0.91 @ 25°C  
pH of 10% solution: 8.5 - 9.0

### REACTIVITY

stability: stable  
materials to avoid: strong acids, strong oxidizers  
conditions to avoid: extremely high temperatures  
hazard classification: corrosive

### FIRE FIGHTING

special procedures: wear NIOSH-approved self-contained breathing apparatus and full protective clothing  
extinguishing media: dry chemical, alcohol foam, carbon dioxide, water  
combustion products: amines, ammonia, hydrogen chloride, organic chlorides  
Products of combustion are toxic.  
Use water-spray to keep containers cool and to knock down fumes.  
Heated solvent vapors can travel to an ignition source and flash back.

### PERSONAL PROTECTION

handling / storage: follow good hygiene practices / do not store near water, food or feed  
eyes: safety goggles  
skin: full work-clothing, impervious gloves  
respiratory: if vaporous, use NIOSH-approved respiratory protection  
ventilation: none specified by manufacturer

### HEALTH HAZARD DATA - HAZARDOUS

route of entry: eyes, skin, ingestion, inhalation  
eye contact: direct contact may cause severe damage  
skin absorption: prolonged contact may cause severe irritation  
ingestion: may cause severe irritation and swelling of mucous membranes; may be fatal  
inhalation: vapors may cause irritation and headache  
toxicology: LD50 (oral, rat): 366 mg/kg, LD50 (dermal, rabbit): 421 mg/kg

### STORAGE & HANDLING

Store in a cool, dry area, away from acids or oxidizers.  
Protect from physical damage.  
Keep container closed.

### SPILLS & DISPOSAL

Floors may be slippery.  
Prevent spills and contaminated wash water from entering sewers and bodies of open water.  
Contain spills with inert material, such as sand or earth; scoop absorbed material into containers.  
Dispose of in accordance with all local, state and federal regulations; incineration is preferred.

**NOTE TO PHYSICIAN**

Probable mucosal damage may contraindicate the use of gastric lavage.

Measures against circulatory shock, as well as oxygen and measures to support breathing may be needed.

If persistent, convulsions may be controlled by the cautious intravenous injection of a short-acting barbiturate drug.