

# MATERIAL SAFETY DATA SHEET

## 1 CHEMICAL PRODUCT & COMPANY IDENTIFICATION

Trade Name FORMULA 158 LEMON DISINFECTANT (DF301)

Manufacturer Banner Chemical Corp  
111 Hill Street  
Orange, NJ 07050

Telephone Numbers - 24 Hour Emergency Assistance

Medical 800-228-5635

Chemtrec 800-424-9300

Chemtrec Int'l 703-527-3887

General Assistance (973) 676-2900

Product Class Cationic/nonionic blend

## 2 COMPOSITION / INFORMATION ON INGREDIENTS

**Ingredient Name CAS Number Percent**

\_Alkyl dimethyl benzyl ammonium chloride (C12-16) 68424-85-1 1 %

\_Di-(C8-10)-alkyl dimethyl ammonium chlorides 68424-95-3 0.8 %

\_Dioctyldimethylammonium chloride 5538-94-3 0.4 %

\_Didecyl dimethyl ammonium chloride 7173-51-5 0.4 %

## 3 HAZARDS IDENTIFICATION

**Emergency Overview** Yellow liquid, **Danger! Corrosive** May be corrosive to the eyes. May cause moderate to severe skin irritation. May be harmful if swallowed.

**Health Effects: Eyes** This product may be corrosive to eyes.

**Health Effects: Skin** This product may cause irritation to the skin. This product may be harmful if it is absorbed through the skin.

**Health Effects: Inhalation** Exposure via inhalation not likely. High vapor or aerosol mist concentrations may be irritating to the nose, throat and upper respiratory tract.

**Health Effects: Ingestion** This product may be harmful if it is swallowed. Ingestion of large amounts may produce gastrointestinal disturbances including irritation, nausea, and diarrhea.

## 4 FIRST AID MEASURES

**Eyes** Immediately flush eyes with water for at least 15 minutes while holding eyelids open. Get medical attention or advice.

**Skin** Immediately take off all contaminated clothing. Wash contaminated clothing before reuse. Immediately flush with water. Get medical attention.

**Inhalation** If inhaled, immediately remove the affected person to fresh air. If the affected person is not breathing, apply artificial respiration. If breathing is difficult, give oxygen. Seek medical attention.

**Ingestion** If the material is swallowed, get immediate medical attention or advice. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Do not induce vomiting.

**Notes to Physician** If the product is ingested, probable mucosal damage may contraindicate the use of gastric lavage. Treat the affected person appropriately.

## 5 FIRE FIGHTING MEASURES

**Flash Point** (> 93.9 °C), > 201 F PMCC **Extinguishing Media** Dry chemical, foam, carbon dioxide, water fog.

**Fire Fighting Equipment / Instructions** Firefighters should wear full fire-fighting turn-out gear (full Bunker gear) including NIOSH-approved self-contained breathing apparatus with full face piece operated in the pressure demand or other positive pressure mode.

## 6 ACCIDENTAL RELEASE MEASURES

### SPILL AND LEAK PROCEDURES

**Emergency Action:** Isolate spill or leak area immediately. Keep unauthorized personnel away. Stay upwind. Keep out of low areas. Ventilate closed spaces before entering. Do not touch or walk through

spilled material. Wear appropriate personal protective equipment during cleanup. Small Spills: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Large Spills: Dike ahead of liquid spill for later disposal. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance, contact your State Water Board or Regional Office of the EPA. Surfaces may become slippery after spillage.

#### **Handling Procedures**

Avoid contact with skin and eyes. Avoid breathing vapors or mists of this product. Wash hands before eating, drinking, smoking, or using toilet facilities. As with all chemicals, good industrial hygiene practices should be followed when handling this material.

## **7 HANDLING & STORAGE**

#### **Storage Procedures**

DO NOT CONTAMINATE WATER, FOOD OR FEED BY STORAGE OR DISPOSAL.

PESTICIDE STORAGE: Store in a dry place no lower in temperature than 50°F or higher than 120°F. Avoid freezing or excessive heat.

#### **Engineering Controls**

Provide adequate local exhaust ventilation to maintain worker exposure below exposure limits.

## **8 EXPOSURE CONTROLS / PERSONAL PROTECTION**

#### **Personal Protective Equipment: Eyes/Face**

Wear chemical goggles and face shield.

#### **Personal Protective Equipment: Skin**

Wear suitable protective clothing. Use impervious gloves.

#### **Personal Protective Equipment: Respiratory**

If vapors are present or irritation is experienced, NIOSH approved respiratory protection for ammoniacal vapors should be worn.

#### **Personal Protective Equipment: General**

Eye wash fountain and emergency showers are recommended.

## **9 PHYSICAL & CHEMICAL PROPERTIES**

**Flash Point** (> 93.9 °C), > 201 F PMCC

**Specific Gravity** (1.007 g/ml), 8.38 lb/gal (@ 25 C)

**Vapor Pressure** Not Determined or Unknown

**Evaporation Rate** Estimated slower than ethyl ether.

**RVOC** 0 %

**Appearance and Odor** Clear liquid,

**Boiling Point** (93.3 °C), 200 F

**Percent Volatile** 85 - 95 % (w/w)

**Vapor Density** Est. heavier than air.

**pH Value** 6.4 (as is)

**Chemical Stability** Stable w/ normal conditions.

## **10 STABILITY & REACTIVITY**

**Conditions to Avoid** Avoid strong oxidizing agents.

**Incompatibility** This product is incompatible with anionic compounds, strong oxidizing agents,

**Hazardous Decomposition** Upon decomposition, this product may yield oxides of nitrogen and ammonia.

**Hazardous Polymerization** Will not occur.

**Carcinogenicity** Not listed as carcinogenic according to IARC, NTP or OSHA.

## **11 TOXICOLOGICAL INFORMATION**

#### **Other Toxicological Information**

**\_Didecyl dimethyl ammonium chloride 7173-51-5**

NIOSH - Selected LD50s and LC50s Oral LD50 Rat: 84 mg/kg; Oral LD50 Mouse: 268 mg/kg

**\_Alkyl dimethyl benzyl ammonium chloride (C12-16) 68424-85-1**

NIOSH - Selected LD50s and LC50s Oral LD50 Rat: 426 mg/kg; Oral LD50 Mouse: 919 mg/kg

**Ecotoxicity** Toxic to fish.

## **12 ECOLOGICAL INFORMATION**

**Environmental Fate** This product is biodegradable.

## 13 DISPOSAL CONSIDERATIONS

**Disposal Instructions** CONTAINER DISPOSAL - Do not reuse empty container. Triple rinse empty container with water. Return metal drum then offer for reconditioning or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities. Plastic containers may be disposed of in a sanitary landfill, incinerated, or if allowed by local authorities, by burning. If burned, stay out of smoke. Offer for recycling if available. For containers 1 gallon or less: Do not reuse empty container (bottle, can, bucket). Wrap container and put in trash.

PESTICIDE DISPOSAL - Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

## 14 TRANSPORT INFORMATION

**DOT Proper Shipping Name** Refer to bill of lading or container label for DOT or other transportation hazard classification, if any.

## 15 REGULATORY INFORMATION

### **Ingredient Name CAS Number Percent**

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**State Regulations** This product may contain the following ingredient(s) known to the State of California to cause cancer, birth defects or other reproductive harm: Ethylene Oxide (CAS RN: 75-21-8) Nitrilotriacetic acid (NTA) (CAS RN: 139-13-9)

**Inventories** This product is considered a pesticide, and is therefore excluded from the United States TSCA Regulations. There is no calculable reportable quantity (RQ) for this product.

### **Disclaimer**

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## 16 OTHER INFORMATION

### **HAZARD RATINGS**

#### **Health**

#### **HMIS**

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#### **Flammability**

#### **Reactivity**

#### **PPE**

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#### **NFPA**