

Precautionary Statements - Response

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
 If eye irritation persists: Get medical advice/attention
 IF ON SKIN: Wash with plenty of soap and water
 Take off contaminated clothing and wash it before reuse
 If skin irritation or rash occurs: Get medical advice/attention

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
Didecylidimonium chloride	7173-51-5	Proprietary
Alkyl dimethyl benzyl ammonium chloride (C12-16)	68424-85-1	Proprietary
Citral	5392-40-5	Proprietary

If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. FIRST-AID MEASURES

First Aid Measures

Eye Contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If eye irritation persists: Get medical advice/attention.
Skin Contact	Wash off immediately with plenty of water for at least 15 minutes. Take off contaminated clothing. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical advice/attention.
Inhalation	Remove to fresh air.
Ingestion	Drink large quantities of raw egg white or water. Do not induce vomiting. Call a physician or poison control center immediately.

Most important symptoms and effects

Symptoms	Skin contact may aggravate an existing dermatitis. Contact may cause irritation and redness.
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Indication of any immediate medical attention and special treatment needed

Notes to Physician	Possible mucosal damage may contraindicate the use of gastric lavage. Measures against circulatory shock and convulsions may be necessary.
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5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Water. Carbon dioxide (CO2). Foam.

Unsuitable Extinguishing Media Not determined.

Specific Hazards Arising from the Chemical

Non-flammable solution.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions Use personal protective equipment as required. Remove all sources of ignition.

Methods and material for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for Clean-Up Soak up with inert absorbent material. Place in appropriate containers for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on Safe Handling Wash thoroughly after handling. Use personal protection recommended in Section 8. Avoid breathing vapors or mists. Use only in well-ventilated areas.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from high heat and open flames. Do not contaminate food or feed stuffs.

Incompatible Materials None known based on information supplied.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Citral 5392-40-5	TWA: 5 ppm inhalable fraction and vapor S*	-	-

Appropriate engineering controls

Engineering Controls Local exhaust ventilation recommended.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Wear approved safety goggles.

Skin and Body Protection Wear suitable gloves.

Respiratory Protection Ensure adequate ventilation, especially in confined areas.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical State	Liquid	Odor	Lemon
Appearance	Yellow liquid	Odor Threshold	Not determined
Color	Yellow		
Property	Values	Remarks • Method	
pH	6-8		
Melting Point/Freezing Point	Not available		
Boiling Point/Boiling Range	Not available		
Flash Point	100 °C / 212 °F	Tag Open Cup	
Evaporation Rate	Not available		
Flammability (Solid, Gas)	n/a-liquid		
Upper Flammability Limits	None		
Lower Flammability Limit	None		
Vapor Pressure	Not determined		
Vapor Density	Not available		
Specific Gravity	0.9964	(1=Water)	
Water Solubility	Completely soluble		
Solubility in other solvents	Not determined		
Partition Coefficient	Not determined		
Auto-ignition Temperature	Not determined		
Decomposition Temperature	Not determined		
Kinematic Viscosity	Not determined		
Dynamic Viscosity	Not determined		
Explosive Properties	Not determined		
Oxidizing Properties	Not determined		

10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions.

Chemical Stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Hazardous Polymerization Hazardous polymerization does not occur.

Conditions to Avoid

Keep out of reach of children.

Incompatible Materials

None known based on information supplied.

Hazardous Decomposition Products

None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Eye Contact Causes serious eye irritation.

Skin Contact Causes skin irritation. May cause an allergic skin reaction.

Inhalation Avoid breathing vapors or mists.

Ingestion Do not taste or swallow.

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Didecyldimonium chloride 7173-51-5	= 84 mg/kg (Rat)	-	-
Nonylphenoxy-poly-(Ethyleneoxy) Ethanol 26027-38-3	-	= 1800 µL/kg (Rabbit)	-
Alkyl dimethyl benzyl ammonium chloride (C12-16) 68424-85-1	= 426 mg/kg (Rat)	-	-
Citral 5392-40-5	= 4950 mg/kg (Rat)	> 2000 mg/kg (Rat) = 2250 mg/kg (Rabbit)	-
Tetrasodium EDTA 64-02-8	= 10 g/kg (Rat)	-	-

Information on physical, chemical and toxicological effects

Symptoms Please see section 4 of this SDS for symptoms.

14. TRANSPORT INFORMATION

DOT Not regulated
IATA Not regulated
IMDG Not regulated

15. REGULATORY INFORMATION

International Inventories
 Not determined

US Federal Regulations

SARA 313
 Not determined

US State Regulations

U.S. State Right-to-Know Regulations
 Not determined

16. OTHER INFORMATION

<u>NFPA</u>	Health Hazards Not determined	Flammability Not determined	Instability Not determined	Special Hazards Not determined
<u>HMIS</u>	Health Hazards 1	Flammability 0	Physical Hazards 0	Personal Protection Not determined

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End of Safety Data Sheet