

4 Quat

SAFETY DATA SHEET

Preparation Date: 08-Jun-2007

Revision Date: 06-Jul-2016

Revision Number: 3

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product Identifier

Product Name 4 Quat

Other means of identification

Item#: 2100

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended use Sanitizer

Uses advised against All other

Details of the supplier of the safety data sheet

Supplier DeLaval Cleaning Solutions
11100 N. Congress Ave.
Kansas City, MO 64153
Tel: 816-891-7700, 8am – 5pm M-F

Emergency Telephone Number

Chemtrec 1-800-424-9300

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin Corrosion/Irritation	Category 2
Serious eye damage/eye irritation	Category 2A

Label Elements

Emergency Overview

WARNING

Hazard Statements

Causes skin irritation

Causes serious eye irritation



Appearance Clear

Physical state Liquid

Odor No information available

Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling
Wear protective gloves/protective clothing/eye protection/face protection

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. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %
Alkyl (C12-16) dimethylbenzylammonium chloride	68424-85-1	3.0
1-Decanaminium, N,N-dimethyl-N-octyl-, chloride	32426-11-2	2.3
Dimethyldioctyl-ammonium chloride	5538-94-3	1.1
Didecyldimethylammonium chloride	7173-51-5	1.1
Ethyl alcohol	64-17-5	<2

If a concentration range is shown, the exact concentration has been withheld as a trade secret.

4. FIRST AID MEASURES

FIRST AID MEASURES

Eye contact	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Call a physician immediately.
Skin contact	Wash off immediately with plenty of water for at least 15 minutes. Call a physician immediately.
Inhalation	Move to fresh air. If not breathing, give artificial respiration. Call a physician immediately.
Ingestion	Do not induce vomiting. Drink 1 or 2 glasses of water. Call a physician or Poison Control Centre immediately. Never give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed

Corrosive. The product causes burns of eyes, skin and mucous membranes.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media

No information available.

Specific hazards arising from the chemical

The product causes burns of eyes, skin and mucous membranes.

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.

NFPA

Health 2

Flammability 0

Instability 0

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Avoid contact with skin, eyes and clothing. Use personal protective equipment.

Environmental Precautions

Prevent further leakage or spillage if safe to do so.

Methods and material for containment and cleaning up

Soak up with inert absorbent material. Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Handling Avoid contact with skin, eyes and clothing.

Conditions for safe storage, including any incompatibilities

Storage Keep containers tightly closed in a dry, cool and well-ventilated place.

Incompatible Materials Incompatible with oxidizing agents, reducing agents

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Only constituents with exposure limits are listed. Any constituent not listed has no known exposure limit.

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Ethyl alcohol 64-17-5	STEL: 1000 ppm	TWA: 1000 ppm TWA: 1900 mg/m ³	3300 ppm

Appropriate engineering controls

Engineering Controls Ensure adequate ventilation, especially in confined areas.

Individual protection measures, such as personal protective equipment

Eye/face Protection Safety glasses with side-shields.

Skin and body protection Wear protective gloves and protective clothing.

Respiratory Protection In case of inadequate ventilation wear respiratory protection.

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	No information available
Appearance	Clear	Odor Threshold	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks/ Method</u>
pH	No information available	
Melting point/freezing point	No information available	

Boiling Point/Range	No information available
Flash Point	No information available
Evaporation rate	No information available
Flammability (solid, gas)	No information available
Flammability Limit in Air	
Upper flammability limit	No information available
Lower flammability limit	No information available
Vapor Pressure	No information available
Vapor Density	No information available
Specific Gravity	1.0
Water Solubility	soluble
Partition coefficient: n-octanol/water	No information available
Autoignition Temperature	No information available
Decomposition temperature	No information available
Viscosity of Product	No information available

Other information

Density No information available

10. STABILITY AND REACTIVITY

Reactivity

May react with other chemicals. Do not mix with other chemicals except as directed on label.

Chemical Stability

Stable under normal conditions.

Possibility of hazardous reactions

None known.

Conditions to Avoid

Extremes of temperature and direct sunlight.

Incompatible Materials

Incompatible with oxidizing agents, reducing agents

Hazardous decomposition products

None known.

11. TOXICOLOGICAL INFORMATION

Principal Routes of Exposure Eye contact, Skin contact, Ingestion, Inhalation

Information on likely routes of exposure

Eyes	Corrosive to the eyes and may cause severe damage including blindness.
Skin	Contact causes severe skin irritation and possible burns.
Ingestion	Harmful if swallowed.
Inhalation	Harmful by inhalation.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization	None known.
Mutagenic effects	None known.
Carcinogenicity	There are no known carcinogenic chemicals in this product. The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
Ethyl alcohol 64-17-5	A3	Not Listed	Known	Not Listed

ACGIH (American Conference of Governmental Industrial Hygienists)
 A3 - Confirmed animal carcinogen with unknown relevance to humans
 NTP (National Toxicology Program)
 Known - Known Carcinogen
 The classification is for "alcoholic beverages" and is intended to cover only that use of Ethyl Alcohol.

Reproductive Effects None known.
STOT - single exposure None known.
STOT-repeated exposure None known.
Aspiration Hazard None known.

Numerical measures of toxicity

If available, toxicity values of individual components are shown below.

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Alkyl (C12-16) dimethylbenzylammonium chloride 68424-85-1	344 mg/kg (Rat)	No data available	No data available
Didecyldimethylammonium chloride 7173-51-5	238 mg/kg (Rat)	No data available	No data available
Ethyl alcohol 64-17-5	No data available	>20000 mg/kg (rabbit)	124.7 mg/L (rat)

2.25% of the mixture consists of ingredient(s) of unknown toxicity

12. ECOLOGICAL INFORMATION

Ecotoxicity

If available, ecotoxicity values of individual components are shown below.

Chemical Name	Algae/aquatic plants	Fish	Microtox	Waterflea
Didecyldimethylammonium chloride 7173-51-5	EC50 0.09 mg/L 72h	LC50 0.28 mg/L 96 h	No data available	LC50 0.0059 mg/L 48 h
Ethyl alcohol 64-17-5	No data available	12.0 - 16.0: 96 h Oncorhynchus mykiss mL/L LC50 static 100: 96 h Pimephales promelas mg/L LC50 static 13400 - 15100: 96 h Pimephales promelas mg/L LC50 flow-through	EC50 = 34634 mg/L 30 min EC50 = 35470 mg/L 5 min	9268 - 14221: 48 h Daphnia magna mg/L LC50 2: 48 h Daphnia magna mg/L EC50 Static 10800: 24 h Daphnia magna mg/L EC50

Persistence and degradability

No information available.

Bioaccumulation/Accumulation

No information available.

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste Disposal Method

Dispose of in accordance with local regulations. Should not be released into the environment.

Contaminated Packaging

Clean container with water. Empty containers should be taken for local recycling, recovery or waste disposal.

14. TRANSPORT INFORMATION

DOT Not regulated

15. REGULATORY INFORMATION

California Proposition 65 This product contains the following Proposition 65 chemicals:

Chemical Name	California Prop. 65
Ethyl alcohol - 64-17-5	Carcinogen Developmental

The list of Proposition 65 chemicals lists "Ethyl alcohol in alcoholic beverages" and is intended to cover only that use of Ethyl Alcohol.

State Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Ethyl alcohol 64-17-5	X	X	X

U.S. EPA Label information

EPA Pesticide registration number 10324-81-82882

EPA Statement

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

EPA Pesticide label

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

DANGER. Corrosive. Causes irreversible eye damage and skin burns. Harmful if swallowed, inhaled or absorbed through the skin. Avoid breathing spray mist. Do not get in eyes, on skin or on clothing. Wear goggles or face shield and rubber gloves and protective clothing when handling. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove contaminated clothing and wash clothing before reuse. ENVIRONMENTAL HAZARDS: This product is toxic to fish and aquatic invertebrates. 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 into sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

16. OTHER INFORMATION

Preparation Date: 08-Jun-2007
Revision Date: 06-Jul-2016
Revision Note: None

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the

date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of SDS