

MATERIAL SAFETY DATA SHEET

ICE MACHINE SANITIZER

MSDS ID: MI0896

Revised: 01-29-2009

Replaces: 08-01-2008

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: ICE MACHINE SANITIZER
MSDS ID: MI0896
Synonyms: N.A.
CAS Number: MIXTURE
Chemical Family: Sanitizer/Disinfectant
Formula: EPA Reg. No. 10324-81-58001

DISTRIBUTED BY:
Manitowoc Ice, Inc.
2110 South 26th St.
Manitowoc, WI 54220
(920) 682-0161
www.manitowocice.com

EMERGENCY RESPONSE NUMBERS:
24 Hour Emergency #: (920) 682-0161
CHEMTREC Emergency #: (800) 424-9300

MANUFACTURED BY: HYDRITE CHEMICAL CO.

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: DANGER! CORROSIVE. Corrosive to the eyes, skin, respiratory tract, and gastrointestinal tract. Harmful if swallowed. Harmful if inhaled. May be fatal if absorbed through the skin.

Physical State: Liquid.
Color: Clear. Colorless.
Odor: No odor.

POTENTIAL HEALTH EFFECTS

Routes Of Exposure: Eyes. Skin. Inhalation. Ingestion. Absorption.

Target Organs: Eyes. Skin. Respiratory System. Central Nervous System.

Eye Contact: CORROSIVE-Causes severe irritation and burns. May cause: permanent eye damage. blindness.

Skin Contact: CORROSIVE-Causes severe irritation and burns. Brief contact may cause: irritation. defatting. Exposures not promptly washed off may lead to toxic effects similar to ingestion.

Skin Absorption: May be fatal if absorbed through the skin.

Inhalation: May be corrosive to the respiratory tract. Severe irritation and burns may result. Vapors or mists may irritate: throat. respiratory tract. High vapor concentrations may cause: central nervous system effects. Symptoms may include: headache. dizziness. drowsiness.

Ingestion: CORROSIVE-Causes severe irritation and burns. May cause: gastrointestinal irritation. nausea. vomiting. diarrhea.

Medical Conditions Aggravated By Exposure To Product: None known.

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Other: Ingestion of ethanol by pregnant women can cause reproductive toxicity to the fetus.

Cancer Information: This product does not contain 0.1% or more of the known or potential carcinogens listed in NTP, IARC, or OSHA.

Potential Environmental Effects: See Section 12.

3. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Component</u>	<u>CAS Number</u>	<u>OSHA Hazard</u>	<u>% by Wt.</u>
Alkyl(50%C14,40%C12,10%C16) dimethyl benzyl ammonium chloride	68424-85-1	YES	3.0 %
Octyl decyl dimethyl ammonium chloride	32426-11-2	YES	2.25 %
Ethyl Alcohol	64-17-5	YES	0 - 2 %
Didecyl dimethyl ammonium chloride	7173-51-5	YES	1.125 %
Diocetyl dimethyl ammonium chloride	5538-94-3	YES	1.125 %

4. FIRST-AID MEASURES

Eye Contact: Immediately flush eyes with plenty of water for at least 15 minutes while holding eyelids open. Tilt head to avoid contaminating unaffected eye. Get immediate medical attention. Remove contact lenses after the first 5 minutes and continue flushing.

Skin Contact: Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention immediately. Do not reuse clothing and shoes until cleaned. Wash with soap and water.

Inhalation: Remove to fresh air. If breathing is difficult, administer oxygen. If not breathing, give artificial respiration, preferably mouth-to-mouth. GET MEDICAL ATTENTION IMMEDIATELY. Keep warm and quiet.

Ingestion: If swallowed, call a physician immediately. DO NOT induce vomiting unless directed to do so by a physician. Never give anything by mouth to an unconscious person. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into the lungs. Have person sip a glass of water if able to swallow.

Note to Physicians: Probable mucosal damage may contraindicate the use of gastric lavage.

5. FIRE FIGHTING MEASURES

Extinguishing Media: For fires in area use appropriate media. For example: Water spray. Dry chemical. Carbon dioxide. Alcohol foam.

Fire Fighting Methods: Evacuate area of unprotected personnel. Wear protective clothing including NIOSH-approved self-contained breathing apparatus. Remain upwind of fire to avoid hazardous vapors and decomposition products. Use water spray to cool fire-exposed containers. Run-off from fire control may cause pollution.

Fire And Explosion Hazards: None known. Contact with strong oxidizing agents may cause fire.

Hazardous Combustion Products: Irritating and/or toxic gases.

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6. ACCIDENTAL RELEASE MEASURES

Spill Clean-Up Procedures: CORROSIVE MATERIAL. Evacuate unprotected personnel from area. Maintain adequate ventilation. Follow personal protective equipment recommendations found in Section 8. Never exceed any occupational exposure limit. Contain spill, place into drums for proper disposal. Flush remaining area with water to remove trace residue and dispose of properly. Avoid direct discharge to sewers and surface waters. Notify authorities if entry occurs.

7. HANDLING AND STORAGE

Handling: Avoid contact with eyes, skin, and clothing. Use with adequate ventilation. Do not swallow. Avoid breathing vapors, mists, or dust. Do not eat, drink, or smoke in work area. Wash thoroughly after handling.

Storage: CORROSIVE MATERIAL. Store in a cool, well ventilated area, out of direct sunlight. Store in a dry location away from heat. Keep away from incompatible materials. Keep containers tightly closed. Do not store in unlabeled or mislabeled containers. Do not store near heat or open flames.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines:

<u>Component</u>	<u>OSHA PEL</u>	<u>OSHA STEL/C</u>	<u>ACGIH TWA</u>	<u>ACGIH STEL/C</u>
Alkyl(50%C14,40%C12,10%C16) dimethyl benzyl ammonium chloride	Not Estab.	Not Estab.	Not Estab.	Not Estab.
Octyl decyl dimethyl ammonium chloride	Not Estab.	Not Estab.	Not Estab.	Not Estab.
Ethyl Alcohol	1000 ppm	Not Estab.	1000 ppm	Not Estab.
Didecyl dimethyl ammonium chloride	Not Estab.	Not Estab.	Not Estab.	Not Estab.
Diocetyl dimethyl ammonium chloride	Not Estab.	Not Estab.	Not Estab.	Not Estab.

Engineering Controls: General room ventilation and local exhaust are required. Maintain adequate ventilation. Do not use in closed or confined spaces. Avoid creating dust or mist. Keep levels below exposure limits. To determine exposure levels, monitoring should be performed regularly.

Eye/Face Protection: Wear chemical safety goggles while handling this product. Wear additional eye protection such as a face shield when the possibility exists for eye contact with splashing or spraying liquid, or airborne material.

Skin Protection: Prevent contact with this product. Wear gloves and protective clothing depending on condition of use. Protective gloves: Impervious. Rubber. Neoprene.

Respiratory Protection: Respiratory protection may be required to avoid overexposure when handling this product. If exposure limits are exceeded, wear: NIOSH-Approved air-purifying respirator with: Organic vapor cartridge. NIOSH-Approved self-contained breathing apparatus. DO NOT exceed limits established by the respirator manufacturer. All respiratory protection programs must comply with OSHA 29 CFR 1910.134 and ANSI Z88.2 requirements and must be followed whenever workplace conditions require a respirator's use.

Other Protective Equipment: Eye-wash station. Safety shower. Impervious clothing. Protective clothing.

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General Hygiene Conditions: Wash with soap and water before meal times and at the end of each work shift. Good manufacturing practices require gross amounts of any chemical be removed from skin as soon as practical, especially before eating or smoking.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid.

Color: Clear. Colorless.

Odor: No odor.

Boiling Point (deg. F): N.D.

Freezing Point (deg. F): N.D.

Melting Point (deg. F): N.D.

Vapor Pressure (mm Hg): N.D.

Vapor Density (air=1): N.D.

Solubility in Water: Complete

pH: 8.0 (as is)

Specific Gravity: 0.990 @ 25C

% Volatile (wt%): ~ 93

Evaporation Rate (nBuAc = 1): N.D.

VOC (wt%): 0.75-1.5

VOC (lbs/gal): 0.06-0.12

Viscosity: N.D.

Flash Point: None when heated to 100 Deg. C

Flash Point Method: COC.

Lower Explosion Limit: N.A.

Upper Explosion Limit: N.A.

Autoignition Temperature: No Data

10. STABILITY AND REACTIVITY

Stability: Stable under normal conditions.

Conditions To Avoid: Avoid elevated temperatures. Avoid mixing with other cleaning products. Mix only with water.

Incompatible Materials: Strong oxidizing agents. Reducing agents.

Hazardous Decomposition Products: Carbon monoxide. Carbon dioxide. Hydrogen chloride.

Possibility of Hazardous Reactions: Hazardous polymerization will not occur under normal conditions. Contact with strong oxidizing agents may cause fire.

11. TOXICOLOGICAL INFORMATION

LD50 Oral: > 2000 mg/kg in male and female rats.

LD50 Skin: > 200 thru 2000 mg/kg in male and female rats.

Primary Skin: Corrosive.

Primary Eye: Corrosive.

LC50 Inhalation: No Data

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12. ECOLOGICAL INFORMATION

Ecotoxicological Information: No data available.

Chemical Fate Information: Product is biodegradable.

13. DISPOSAL CONSIDERATIONS

Hazardous Waste Number:

Disposal Method: Dispose of in a permitted hazardous waste management facility following all local, state and federal regulations. Chemical additions to, processing of, or otherwise altering this material may make this waste management information incomplete, inaccurate, or otherwise inappropriate. Furthermore, state and local waste disposal requirements may be more restrictive or otherwise different from federal laws and regulations. Since emptied containers retain product residue, follow label warnings even after container is emptied. DO NOT pressurize, cut, weld, solder, drill, grind or expose empty containers to heat, flame, sparks or other sources of ignition.

14. TRANSPORTATION INFORMATION

DOT (Department of Transportation):

Proper Shipping Name: Disinfectants, Liquid, Corrosive N.O.S. (Quaternary Ammonium Compound)
Hazard Class: 8
Identification Number: UN1903
Packing Group: III
Label Required: CORROSIVE

Note: The listed Transportation Classification does not address regulatory variations due to changes in package size, mode of shipment or other regulatory descriptors. In the United States, it may be possible to reclassify this material as a Consumer Commodity ORM-D based on 49 CFR 173.154 (b)(c).

15. REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS

TSCA Inventory Status: This product or all components of this product are listed on the EPA/TSCA Inventory of Chemical Substances.

SARA Title III Section 311/312 Category:

Immediate (Acute) Health Hazard: Y

Delayed (Chronic) Health Hazard: N

Fire Hazard: N

Sudden Release Of Pressure Hazard: N

Reactive Hazard: N

SARA Section 302/304/313/HAP:

<u>Component</u>	<u>CERCLA RQ</u>	<u>SARA RQ</u>	<u>SARA TPQ</u>	<u>SARA 313</u>	<u>U.S. HAP</u>
Alkyl(50%C14,40%C12,10%C16) dimethyl	N.A.	N.A.	N.A.	NO	NO

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benzyl ammonium chloride

Octyl decyl dimethyl ammonium chloride	N.A.	N.A.	N.A.	NO	NO
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Ethyl Alcohol	N.A.	N.A.	N.A.	NO	NO
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Didecyl dimethyl ammonium chloride	N.A.	N.A.	N.A.	NO	NO
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Diocetyl dimethyl ammonium chloride	N.A.	N.A.	N.A.	NO	NO
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U.S. STATE REGULATIONS

California - The following components are listed under Proposition 65:

Benzyl Chloride (trace impurity < 2 ppm)

Ethanol (0.75 - 1.5%)

Wisconsin - The following components are listed as a Wisconsin HAP:

None.

16. ADDITIONAL INFORMATION

Hydrite Rating System

Health: 3

Flammability: 0

Reactivity: 0

* = Chronic Health Hazard

NFPA Rating System

Health: 3

Flammability: 0

Reactivity: 0

Special Hazard: None

MSDS Abbreviations

N.A. = Not Applicable

N.D. = Not Determined

HAP = Hazardous Air Pollutant

VOC = Volatile Organic Compound

C = Ceiling Limit

N.E./Not Estab. = Not Established

MSDS Prepared by: JAK

Reason for Revision: Changes made throughout the MSDS.

The data in this Material Safety Data Sheet relates to the specific material designated and does not relate to its use in combination with any other material or process. The data contained is believed to be correct. However, since conditions of use are outside our control it should not be taken as warranty or representation for which HYDRITE CHEMICAL CO. assumes legal responsibility. This information is provided solely for your consideration, investigation, and verification.