

**MICHIGAN STATE INDUSTRIES
DISINFECTANT / SANITIZER / DEODORIZER**

SAFETY DATA SHEET

SECTION 1 – PRODUCT NAME AND COMPANY IDENTIFICATION

1.1 Product name: Disinfectant / Sanitizer / Deodorizer
 General use: Disinfecting agent
 Product description: Pink liquid
 Product number(s): 8759

1.2 Manufacturer: Michigan State Industries, 17600 Ryan Rd, Detroit MI, 48212
 Telephone number: (313) - 368 - 3200 x51412
 Emergency number: Poison Control Center: (800) - 222 - 1222

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SECTION 2 – HAZARDS IDENTIFICATION



2.1	Classification of the substance:	GHS05 Cat. 1C; Skin	GHS09 Cat. 1; Eye	GHS06 Cat. 4; Aquatic	GHS06 Cat. 5; Toxicity
2.2	Signal word:	DANGER			
2.2	Hazard statement:	H301 Toxic if swallowed.	H312 Harmful in contact with skin.	H314 Causes severe skin burns and eye damage.	H400 Very toxic to aquatic life.
2.3	Precautionary prevention statements:	P260: Do not breathe dust / fume/ gas / mist / vapors / spray.	P264: Wash exposed skin thoroughly after handling.	P273: Avoid release to the environment.	P280: Wear protective gloves / protective clothing / eye protection / face protection.
2.4	Precautionary response statements	P310: Immediately call a POISON CENTER or doctor/physician.	P301, P330, P381: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.	P304, P340: IF INHALED: Remove victim to fresh air, rest in a position comfortable for breathing.	P305, P351, P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing as needed.
2.5	Precautionary storage statement:	P363: Wash contaminated clothing before reuse.	P405: Store locked up.	P501: Dispose of contents/container in accordance with local / regional / national / international regulations.	
2.6	Precautionary disposal statement:				
2.7	NFPA / HMIS rating: Factory	3, 0, 0, COR			
	End User (concentrated/diluted)	1, 0, 0, B			

SECTION 3 – COMPOSITION / INFORMATION ON INGREDIENTS

3.1	Hazardous components:	CAS #	% by wt.	OSHA PEL	ACGIH TWA	SARA	RQ
				PPM	mg/M ³	PPM	mg/M ³
	n-alkyl dimethyl benzyl ammonium chloride	68391-01-53	<7%	Not established	Not established	311 / 312	None
	n-alkyl dimethyl ethylbenzyl ammonium chloride	68956-79-63	<7%	Not established	Not established	311 / 312	None

The remaining components of this product are non-hazardous or are in small enough quantities as to not meet regulatory thresholds for disclosure. These components contain no substances or impurities which would influence the classification of this product. All components and their specific proportions in this product are considered proprietary to Michigan State Industries.

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SECTION 4 – FIRST AID MEASURES

- 4.1 Description of first aid measures
- General information: Immediately remove any clothing soiled by the product. Always seek medical help for any exposure.
- After inhalation: In case of unconsciousness place patient stably in side position for transportation. Supply fresh air. If required, provide artificial respiration. Keep patient warm.
- After skin contact: Immediately rinse with water. Seek immediate medical advice.
- After eye contact: Remove contact lenses if worn. Rinse eye for several minutes under running water. Seek medical advice.
- After swallowing: Do not induce vomiting; call for medical help immediately. Rinse out mouth and then drink plenty of water. A person vomiting while on their back should be turned onto their side.

SECTION 5 – FIRE FIGHTING PROCEDURES

- 5.1 Extinguishing media: Carbon dioxide, water fog, chemical foam, dry chemical. Material is non-flammable.
- 5.2 General hazards: Material is corrosive, avoid contact and conditions that result in agitating or foaming the material.
- 5.3 Advice for firefighters: Protective equipment: Wear a self-contained respiratory protective device.
- 5.4 Unusual hazards: Do not allow this product to escape into the surrounding environment.
- 5.5 Fire fighting procedures: Keep containers cool with water spray to prevent container rupture due to steam buildup; floor will become slippery if material is released. Material is alkaline and will irritate the eyes if product or fumes contact the eyes.
- 5.6 Decomposition compounds: Oxides of carbon, chlorine, and nitrogen may be released with sufficient thermal energy.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

- 6.1 Protective equipment and emergency procedures: Wear protective equipment. Keep unprotected persons away. Particular danger of slipping on leaked/spilled product. Ensure adequate ventilation, material is very irritating, avoid direct contact.
- 6.2 Environmental precautions: Dilute with plenty of water and do not allow it to enter sewers, surface or ground water.
- 6.3 Methods and materials for containment and clean up: Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Use neutralizing agent. Clean the affected area carefully, dispose contaminated material as waste according to Section 13.
- 6.4 Reference to other sections: See Section 7 for information on safe handling. See Section 8 for information on personal protection equipment.

SECTION 7 – HANDLING AND STORAGE

- 7.1 Precautions for safe handling: Ensure good ventilation / exhaustion at the workplace. Prevent formation of aerosols.
- 7.2 Conditions for safe storage: Do not store together with acids or foodstuffs. Store in cool, dry conditions in well sealed receptacles.
- 7.3 Specific end use(s): No further relevant information available.

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

- 8.1 Exposure controls:
- General protective and hygienic measures:** Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Avoid direct contact with the eyes and skin.
- Respiratory protection:** None required while threshold limits are kept below maximum allowable concentrations; if TWA exceeds limits, NIOSH approved respirator must be worn. Refer to 29 CFR 1910.134, ANSI Z88.2, or European standard EN 149 for complete regulations.
- Protection of hands:** Protective gloves, the glove material has to be impermeable and resistant to the product, such as neoprene, butyl or nitrile rubber gloves with cuffs.
- Eye protection:** Safety glasses and / or goggles with side shields.
- Body protection:** Protective work clothing.

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SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

9.1	Appearance:	Pink liquid
	Odor:	Characteristic
	Odor threshold:	ND
	pH:	6.0 - 8.0
	Melting point / freezing point:	0°C
	Initial boiling point and boiling range:	100°C
	Flash point:	ND
	Evaporation rate:	Similar to water
	Flammability (solid, gas):	ND
	Upper / lower flammability or explosive limits:	ND
	Vapor pressure:	17.5 mmHg
	Vapor density:	ND
	Relative density:	0.999, 25°C
	Solubility:	Soluble in water
	Partition coefficient: n-octanol/water:	ND
	Autoignition temperature:	ND
	Decomposition temperature:	ND
9.2	Other information:	10% active quaternary

SECTION 10 – STABILITY AND REACTIVITY

10.1	Reactivity:	No spontaneous reactivity
10.2	Chemical stability:	Thermal decomposition possible at temperatures exceeding 600°F, no decomposition if used according to specifications.
10.3	Possible hazardous reactions:	Corrosive action on metals, reacts with powdered metals, reacts strongly with acids.
10.4	Conditions to avoid:	No further relevant information available.
10.5	Incompatible materials:	Strong oxidizers and acids.
10.6	Decomposition products:	Oxides of carbon, nitrogen, chlorine.

SECTION 11 – TOXICOLOGICAL INFORMATION

11.1	Hazardous Ingredients	CAS #	EINECS #	LD 50, species / route / concentration
	n-alkyl dimethyl benzyl ammonium chloride	68391-01-5	269-919-4	Rat, oral, 150 mg/liter
	n-alkyl dimethyl ethylbenzyl ammonium chloride	68956-79-6	273-318-2	Rat, oral, 150 mg/liter
11.2	Serious eye damage/irritation:	Causes severe skin burns and serious eye damage.		
11.3	Respiratory or skin sensitization:	No data available		
11.4	Repeated dose toxicity:	No data available		
11.5	STOT (single/repeated)	No data available		
11.6	Carcinogenicity:	No data available		
11.7	Mutagenicity:	No data available		
11.8	Reproductive toxicity:	No data available		

SECTION 12 – ECOLOGICAL INFORMATION

12.1	Toxicity:	Alkyl dimethyl benzyl (or ethylbenzyl) ammonium chloride	LC50, Fathead minnow, 0.86 mg/liter, (96 hours) Product is extremely toxic towards aquatic environments.
12.2	Persistence and degradability:	Expected to be easily biodegradable based on composition.	
12.3	Bioaccumulative potential:	Not expected to exhibit this behavior based on composition.	
12.4	Soil mobility:	No specific data available.	
12.5	General information:	No data are available on the adverse effects of this material on the environment. Neither COD nor BOD data are available. Based on the chemical composition of this product it is assumed that the mixture can be treated in an acclimatized biological waste treatment plant system in limited quantities. However, such treatment should be evaluated and approved for each specific biological system.	

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SECTION 13 – DISPOSAL CONSIDERATIONS

- 13.1 Waste treatment methods: It is recommended that small amounts may be diluted with plenty of water and washed away. Dispose of bigger amounts in accordance with Local Authority requirements. Refer to 40 CFR 260 - 299 for complete waste disposal regulations for alkaline materials. Consult your local, state, or federal agency before disposing of any chemicals. Improper disposal of excess product is a violation of Federal Law. Triple rinse empty containers and recycle or dispose of in a sanitary landfill.

SECTION 14 – TRANSPORTATION INFORMATION

- 14.1 UN number: UN 1760
DOT, ADR, IMDG, IATA
- 14.2 Proper shipping name: Corrosive liquid, n.o.s (Quaternary ammonium chloride)
DOT, ADR, IMDG, IATA
- 14.3 Transport hazard class: Corrosive liquid 8
DOT, ADR, IMDG, IATA
- 14.4 Packing group: III
DOT, ADR, IMDG, IATA
- 14.5 Environmental hazards: Yes
Marine

Note: Transportation information provided is for reference only. Customer is urged to consult 49 CFR 100 - 177, IMDG, IATA, EC, United Nations TDG, and WHMIS (Canada) TDG information manuals for detailed regulations and exceptions covering specific container sizes, packaging materials and methods of shipping.

SECTION 15 – REGULATORY INFORMATION

- 15.1 TSCA: All components of this product are listed on the U.S. Toxic Substances Control Act Chemical Inventory (TSCA Inventory) exempted from listing because a Low Volume Exemption has been granted in accordance with 40 CFR 723.50.
- 15.2 SARA TITLE III: Not listed in 313. Listed in 311 / 312 as immediate / delayed health hazard.
- 15.3 CERCLA: None
- 15.4 California Prop. 65: Not listed
- 15.5 Right-To-Know: Not listed.
- 15.6 CPR classification: WHMIS Classification E, D2B
- 15.7 Canadian IDL: Components of this product identified by CAS number and listed on the Canadian Ingredient Disclosure List are shown in Section 2.
- 15.8 Can. DSL / NDSL: Components of this product identified by CAS number are listed on the DSL or NDSL, or are otherwise in compliance with the New Substances Notification (NSN) regulations. Only ingredients classified as "hazardous" are listed in Section 2 unless otherwise indicated.
- 15.9 EINECS: Components of this product identified by CAS numbers are on the European Inventory of Existing Commercial Chemical Substances.

SECTION 16 – OTHER INFORMATION

- 16.1 Risk phrases: R50 / 68 / 20 / 21 / 22: Harmful, possible risk of irreversible effects through inhalation, contact with skin and if swallowed. Severe eye irritant. Very toxic to aquatic organisms.
- Safety phrases: S36 / 37 / 39: Wear protective clothing, gloves, and eye / face protection.

Symbol for label:



GHS05



GHS09



GHS06

The information contained herein is believed to be accurate but is not warranted to be so. Data and calculations are based on information furnished by the manufacturer of the product and manufacturers of the components of the product. Users are advised to confirm in advance of need that information is current, applicable and suited to the circumstances of use. Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Furthermore, vendor assumes no responsibility for injury caused by abnormal use of this material even if reasonable safety procedures are followed. Any questions regarding this product should be directed to the manufacturer of the product as described in Section 1.