

Zerex® SUPER CLEANER ZXC02

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

Ashland	Regulatory Information Number	1-800-325-3751
P.O. Box 2219	Telephone	614-790-3333
Columbus, OH 43216	Emergency telephone	1-800-ASHLAND (1-800-274-5263)

Product name	Zerex® SUPER CLEANER
Product code	ZXC02
Product Use Description	No data

**2. HAZARDS IDENTIFICATION**

**Emergency Overview**

Appearance: liquid

WARNING! REDUCES BLOOD'S OXYGEN-CARRYING CAPACITY. MAY BE HARMFUL IF SWALLOWED. CAUSES EYE, SKIN AND RESPIRATORY TRACT IRRITATION.

**Potential Health Effects**

**Routes of exposure**

Inhalation, Skin absorption, Skin contact, Eye Contact, Ingestion

**Eye contact**

Can cause severe eye irritation. Symptoms include stinging, tearing, redness, and swelling of eyes. Can injure eye tissue.

**Skin contact**

Can cause severe skin irritation. Symptoms may include redness and burning of skin, and other skin damage. The feeling of irritation or pain may be delayed.

**Ingestion**

Swallowing small amounts of this material during normal handling is not likely to cause harmful effects. Swallowing large amounts may be harmful.

**Inhalation**

It is possible to breathe this material under certain conditions of handling and use (for example, during heating, spraying, or stirring). Breathing small amounts of this

Zerex® SUPER CLEANER ZXC02

material during normal handling is not likely to cause harmful effects. Breathing large amounts may be harmful. Symptoms are not expected at air concentrations below the recommended exposure limits, if applicable (see Section 8.).

**Aggravated Medical Condition**

Preexisting disorders of the following organs (or organ systems) may be aggravated by exposure to this material: lung (for example, asthma-like conditions), Skin, upper respiratory tract, Exposure to this material may aggravate any preexisting condition sensitive to a decrease in available oxygen, such as chronic lung disease, coronary artery disease or anemias.

**Symptoms**

Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include: stomach or intestinal upset (nausea, vomiting, diarrhea), irritation (nose, throat, airways), cough, central nervous system depression (dizziness, drowsiness, weakness, fatigue, nausea, headache, unconsciousness), lowered blood pressure, effects on heart rate, lack of coordination, difficulty in breathing, lung edema (fluid buildup in the lung tissue), lung damage, damage to the mouth, throat, and/or airways, shock, cyanosis (causes blue coloring of the skin and nails from lack of oxygen), convulsions, May cause methemoglobinemia, a blood abnormality that may cause headache, difficulty breathing, lightheadedness, weakness, confusion, rapid heart rate and cyanosis (lack of oxygen in the tissues causing blue-colored skin and nails).

**Target Organs**

No data

**Carcinogenicity**

This material is not listed as a carcinogen by the International Agency for Research on Cancer (IARC), the National Toxicology Program (NTP), or the Occupational Safety and Health Administration (OSHA).

**Reproductive hazard**

This material (or a component) has been shown to cause birth defects in laboratory animal studies. Harm to the fetus occurs only at exposure levels that harm the pregnant animal. The relevance of these findings to humans is uncertain.

**Other information**

No data

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Zerex® SUPER CLEANER ZXC02

Components	CAS-No.	Concentration
ORGANIC SALT	NJTS# 254504001- 5244	>=15-<20%
SODIUM NITRATE ORGANIC SALT	7631-99-4 NJTS# 254504001- 5208	>=1.5-<5% >=1.5-<5%
SODIUM HYDROXIDE	1310-73-2	>=1.5-<5%

#### 4. FIRST AID MEASURES

##### Eyes

If symptoms develop, immediately move individual away from exposure and into fresh air. Flush eyes gently with water for at least 15 minutes while holding eyelids apart; seek immediate medical attention. Do not remove the victim from water access for transport to a medical facility unless instructed to do so by qualified medical personnel. If possible, continue flushing the eye gently with water while transporting the victim.

##### Skin

Remove contaminated clothing. Flush exposed area with large amounts of water. If skin is damaged, seek immediate medical attention. If skin is not damaged and symptoms persist, seek medical attention. Launder clothing before reuse.

##### Ingestion

Seek medical attention. If individual is drowsy or unconscious, do not give anything by mouth; place individual on the left side with the head down. Contact a physician, medical facility, or poison control center for advice about whether to induce vomiting. If possible, do not leave individual unattended.

##### Inhalation

If symptoms develop, move individual away from exposure and into fresh air. If symptoms persist, seek medical attention. If breathing is difficult, administer oxygen. Keep person warm and quiet; seek immediate medical attention.

##### Notes to physician

**Hazards:** Overexposure to this product (or a component) may cause methemoglobinemia, which in sufficient concentration causes cyanosis. Severe cyanosis may require intravenous injection of methylene blue. Methylene blue is contraindicated if the patient has confirmed or suspected glucose-6-phosphate dehydrogenase deficiency.

**Treatment:** No information available.

Zerex® SUPER CLEANER ZXC02

## **5. FIRE-FIGHTING MEASURES**

### **Suitable extinguishing media**

Water mist, Carbon dioxide (CO<sub>2</sub>), Dry chemical

### **Hazardous combustion products**

May form: carbon dioxide and carbon monoxide, hydrocarbons, nitrogen compounds, nitrogen oxides, toxic fumes, corrosive vapors, sodium oxides

### **Precautions for fire-fighting**

Wear full firefighting turn-out gear (full Bunker gear), and respiratory protection (SCBA). Use water spray to cool fire exposed containers and structures until fire is out if it can be done with minimal risk. Avoid spreading burning liquid with water used for cooling purposes.

### **Flammability Class for Flammable Liquids**

Combustible Liquid Class IIIB

## **6. ACCIDENTAL RELEASE MEASURES**

### **Personal precautions**

For personal protection see section 8. Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed.

### **Environmental precautions**

Prevent spreading over a wide area (e.g. by containment or oil barriers). Do not let product enter drains. Do not flush into surface water or sanitary sewer system.

### **Methods for cleaning up**

Keep in suitable, closed containers for disposal. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).

### **Other information**

Comply with all applicable federal, state, and local regulations.

## **7. HANDLING AND STORAGE**

### **Handling**

Zerex® SUPER CLEANER ZXC02

Containers of this material may be hazardous when emptied. Since emptied containers retain product residues (vapor, liquid, and/or solid), all hazard precautions given in the data sheet must be observed.

**Storage**

Store in a cool, dry, ventilated area.

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

**Exposure Guidelines**

**SODIUM HYDROXIDE**

**1310-73-2**

ACGIH	Ceiling Limit Value:	2 mg/m3
NIOSH	Ceiling Limit Value and Time Period (if specified):	2 mg/m3
OSHA Z1	Permissible exposure limit	2 mg/m3

**General advice**

These recommendations provide general guidance for handling this product. Personal protective equipment should be selected for individual applications and should consider factors which affect exposure potential, such as handling practices, chemical concentrations and ventilation. It is ultimately the responsibility of the employer to follow regulatory guidelines established by local authorities.

**Exposure controls**

Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below exposure guidelines (if applicable) or below levels that cause known, suspected or apparent adverse effects.

**Eye protection**

Wear chemical splash goggles when there is the potential for exposure of the eyes to liquid, vapor or mist. Maintain eye wash station near work area.

**Skin and body protection**

Wear resistant gloves such as:

Neoprene

Wear appropriate chemical impervious clothing and boots whenever there is potential for skin contact with product. Launder clothing before reuse. Maintain safety shower at all locations where skin contact could occur. Contact your local safety equipment supplier to assist the facility in determining proper selection of personal protective equipment for the applications/operations present at your facility.

Zerex® SUPER CLEANER ZXC02

**Respiratory protection**

A NIOSH-approved air-purifying respirator with an appropriate cartridge and/or filter may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits (if applicable) or if overexposure has otherwise been determined. Protection provided by air-purifying respirators is limited. Use a positive pressure, air-supplied respirator if there is any potential for uncontrolled release, exposure levels are not known or any other circumstances where an air-purifying respirator may not provide adequate protection.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

<b>Physical state</b>	liquid
<b>Form</b>	No data
<b>Colour</b>	No data
<b>Odour</b>	No data
<b>Boiling point/boilingrange</b>	212 °F / 100 °C @ 1,013.333333 hPa
<b>pH</b>	11.2
<b>Flash point</b>	200.1 °F / 93.4 °C
<b>Evaporation rate</b>	No data
<b>Explosion limits</b>	No data
<b>Vapour pressure</b>	23.3333333 hPa @ 68 °F / 20 °C
<b>Vapour density</b>	No data
<b>Density</b>	No data
<b>Solubility</b>	No data
<b>Partition coefficient: n-octanol/water</b>	No data
<b>Autoignition temperature</b>	No data

**10. STABILITY AND REACTIVITY****Stability**

Stable.

**Conditions to avoid****Incompatible products**

Zerex® SUPER CLEANER ZXC02

Avoid contact with:, strong oxidizing agents, combustible material, organic materials, powdered metals, reducing agents, Strong acids, reactive metals such as aluminum and magnesium, steel, strong mineral acids, strong organic acids, water, Copper alloys, glycols, halogenated hydrocarbons, organic nitro compounds

**Hazardous decomposition products**

May form:, carbon dioxide and carbon monoxide, hydrocarbons, nitrogen compounds, nitrogen oxides (NOx), toxic fumes, corrosive vapors, sodium oxides

**Hazardous reactions**

Product will not undergo hazardous polymerization.

**Thermal decomposition**

No data

**11. TOXICOLOGICAL INFORMATION**

**Acute oral toxicity**

SODIUM NITRATE	LD 50 Rat: 3,236 mg/kg
ORGANIC SALT	LD 50 Rat: 3,030 mg/kg
SODIUM HYDROXIDE	LD Lo Rabbit: 500 mg/kg

**Acute inhalation toxicity**

**Acute dermal toxicity**

ORGANIC SALT	LD 50 Rabbit: 5,000 mg/kg
SODIUM HYDROXIDE	LD 50 Rabbit: 1,350 mg/kg

**12. ECOLOGICAL INFORMATION**

**Aquatic toxicity**

**Acute and Prolonged Toxicity to Fish**

No data

Zerex® SUPER CLEANER ZXC02

**Acute Toxicity to Aquatic Invertebrates**

No data

**Environmental fate and pathways**

No data

**13. DISPOSAL CONSIDERATIONS**

**Waste disposal methods** Dispose of in accordance with all applicable local, state and federal regulations. For assistance with your waste management needs - including disposal, recycling and waste stream reduction, contact Ashland Distribution's Environmental Services Group at 800-637-7922.

**14. TRANSPORT INFORMATION**

**IMDG:**

UN3266, CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (SODIUM SILICATE, SODIUM NITRATE) 8, III

**IATA\_P:**

UN3266, Corrosive liquid, basic, inorganic, n.o.s. (SODIUM SILICATE, SODIUM NITRATE) 8, III

**IATA\_C:**

UN3266, Corrosive liquid, basic, inorganic, n.o.s. (SODIUM SILICATE, SODIUM NITRATE) 8, III

**CFR\_ROAD:**

UN3266, Corrosive liquid, basic, inorganic, n.o.s. (SODIUM SILICATE, SODIUM NITRATE) 8, III

**CFR\_RAIL:**

UN3266, Corrosive liquid, basic, inorganic, n.o.s. (SODIUM SILICATE, SODIUM NITRATE) 8, III

**CFR\_INWTR:**

UN3266, Corrosive liquid, basic, inorganic, n.o.s. (SODIUM SILICATE, SODIUM NITRATE) 8, III

**IMDG\_INWTR:**

UN3266, CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (SODIUM SILICATE, SODIUM NITRATE) 8, III

**IMDG\_ROAD:**

UN3266, CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (SODIUM SILICATE, SODIUM NITRATE) 8, III

**IMDG\_RAIL:**



Zerex® SUPER CLEANER ZXC02

UN3266, CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (SODIUM SILICATE, SODIUM NITRATE) 8, III

Dangerous goods descriptions (if indicated above) may not reflect package size, quantity, end-use or region-specific exceptions that can be applied. Consult shipping documents for descriptions that are specific to the shipment.

**15. REGULATORY INFORMATION**

**California Prop. 65**

Proposition 65 warnings are not required for this product based on the results of a risk assessment.

**SARA Hazard Classification** Acute Health Hazard

**SARA 313 Component(s)**

SODIUM NITRATE 7631-99-4 2.7334%

	<b>Health</b>	<b>Flammability</b>	<b>Reactivity</b>	<b>Other</b>
<b>HMIS</b>	2	0	0	
<b>NFPA</b>				No data

**16. OTHER INFORMATION**

The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances. This MSDS has been prepared by Ashland's Environmental Health and Safety Department (1-800-325-3751).