

Material Safety Data Sheet

May be used to comply with OSHA's Hazard Communication Standard, 29CFR1910.1200. Standard must be consulted for specific requirements.

QUICK IDENTIFIER
 Common Name: (used on label and list)

3 - 0 - 2

SECTION 1 - GENERAL INFORMATION

Name	ZECOL PRODUCTS COMPANY		
Address	4635 WILLOW DRIVE	Emergency Telephone No.	(CHEM-TEL) 1-800-255-3924
City, State, and ZIP	MEDINA, MN 55340	Other Information Calls	(763) 478-3438
Signature of Person Responsible for Preparation (Optional)		Date Prepared	JUNE 2, 2003 (Rev.)

H HEALTH **3**
F FLAMMABILITY **0**
R REACTIVITY **2**
 Style NC-L503R
PERSONAL PROTECTION **0**

SECTION 2 - HAZARDOUS INGREDIENTS/IDENTITY

Hazardous Component(s) [chemical & common name(s)]	% Percentage	OSHA PEL ppm	ACGIH TLV ppm	CAS NO.
Sodium Hypochlorite	12.5 - 15.6	NA	NA	7681-52-9
Sodium Hydroxide	0.2 - 2.0	2mg/m ³	2mg/m ³	1310-73-2
Inert Ingredients	Balance	NA	NA	7732-18-5

(Not subject to the reporting requirements of Section 313, Title III of SARA.)

SECTION 3 - PHYSICAL & CHEMICAL CHARACTERISTICS

Boiling Point	219°F, 104°C	Specific Gravity (H ₂ O=1)	1.224 @ 20°C
Vapor Density (Air=1)	Not Listed	Vapor Pressure (mm Hg)	Variable - water plus products of decomposition.
Solubility in Water	Complete	Evaporation Rate (N-Butyl Acetate=1)	Not Listed
Appearance and Odor	Yellow-green liquid, chlorine odor		

SECTION 4 - FIRE & EXPLOSION DATA

Flash Point	Not Applicable	Method Used	Not Applicable	Flammable Limits in Air % by Volume	LEL Lower Not Applicable	UEL Upper Not Applicable
Auto-Ignition Temperature	Not Applicable	Extinguisher Media	Flood with water or carbon dioxide (CO ₂)			
Special Fire Fighting Procedure	Use NIOSH certified gas mask with canister for chlorine or use self-contained breathing apparatus.					

Unusual Fire and Explosion Hazards: Material is strong oxidizer. Contact with combustibles may initiate or promote combustion. Acid and heat accelerate combustion. Decomposition products may include chlorine.

The information contained herein is based on current knowledge and experience; no responsibility is accepted that the information is sufficient or correct in all cases. Users should consider these data only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use and disposal of these materials and the safety and health of employees and customers and the protection of the environment.

SECTION 5 - PHYSICAL HAZARDS (REACTIVITY DATA) POOL SHOCK TREATMENT (12.5%) (cont.)

Stability	<input type="checkbox"/> Unstable <input checked="" type="checkbox"/> Stable	Conditions	Fairly stable in concentrations below 10%, but decreases with concentration, light, heat, fire, decrease in pH, metallic impurities like nickel, cobalt, copper, iron. Naturally decomposes with age.
Incompatibility (Materials to Avoid)	Acids, alcohols, amines, ammonia, chlorinated isocyanurates, combustibles, cyanides, detergents, ethers, hydrocarbons, oxidizable materials, reducing agents. Corrosive to most metals.		
Hazardous Decomposition Products	Contact with acid releases chlorine gas; natural decomposition product is oxygen. Thermal decomposition, or burning, may produce hydrochloric acid. Contact with ammonia may release hazardous gases. Other decomposition products are hypochlorous acid, sodium chlorate, sodium chloride.		
Hazardous Polymerization	<input type="checkbox"/> May Occur <input checked="" type="checkbox"/> Will Not Occur	Conditions to Avoid	None

SECTION 6 - HEALTH HAZARDS

1. Acute Extreme irritant to eyes, skin, mucous membranes, throat; stomach pain & possible ulceration. 2. Chronic Can cause damage to eyes. Can cause damage and chemical burn to skin.

Signs and Symptoms of Exposure Irritated eyes, mucous membranes or throat. Irritated or reddening of skin. Stomach pain.

Medical Conditions Generally Aggravated by Exposure None Found

Chemical Listed as Carcinogen or Potential Carcinogen	National Toxicology Program	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	I.A.R.C. Monographs	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	OSHA	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
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Emergency and First Aid Procedures If any symptoms persist, contact a physician!

ROUTES OF ENTRY

1. Inhalation Remove victim to fresh air. Call physician if exposure is severe.
2. Eyes Immediately flush with water for at least 15 minutes. Get medical attention immediately.
3. Skin Remove soaked clothes. Wash with plenty of soap and water for at least 15 minutes.
4. Ingestion If conscious, give large quantities of milk or gelatin solution; if unavailable, give water. Do not give vinegar or other acids. DO NOT induce vomiting. Get prompt medical attention.

SECTION 7 - SPECIAL PRECAUTIONS AND SPILL/LEAK PROCEDURES

Precautions to be Taken in Handling and Storage Store in a cool, dry area away from direct sunlight in an upright position. Avoid contact with eyes and skin and avoid breathing vapors. Vacate poorly ventilated areas as soon as possible.

Other Precautions This product is corrosive and may cause severe skin irritation or chemical burns to broken skin; causes eye damage. Strong oxidizing agent: Mixing with gross filth, acids, ammonia or other chemicals may release hazardous gases irritating to eyes, lungs and mucous membranes.

Steps to be Taken in Case Material is Released or Spilled Rinse floor with large quantities of water. Avoid contact with material or breathing of any vapors. Dispose of solution and empty container as outlined below.

Waste Disposal Methods (Consult federal, state, and local regulations) Rinse empty container thoroughly with water and return to manufacturer or discard in approved trash collection or landfill. Product or rinseate that cannot be used should be diluted with water and disposed of in a sanitary sewer. Do not contaminate food or feed by storage, disposal or cleaning of equipment.

SECTION 8 - SPECIAL PROTECTION INFORMATION/CONTROL MEASURES

Respiratory Protection (Specify Type) Use NIOSH or MSHA approved respirator appropriate for this product when permissible exposure limits are exceeded.

Ventilation Local exhaust is recommended.

Protective Gloves Rubber or neoprene gloves.

Other Protective Clothing or Equipment Chemical goggles and face shield; rubber splash apron and rubber boots. Safety shower and eye wash fountain should be located nearby.

Work/Hygienic Practices Avoid contact with material by using appropriate protective wear. Vacate poorly ventilated areas and do not return until odors have dissipated.