

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"/> |
|---|-----------------------------|--|---------------------|--|------|--|

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.