

**Material Safety Data Sheet**

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

**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	JAN 1, 2002 (REV)

<b>H</b>	<b>2</b>
HEALTH	
<b>F</b>	<b>2</b>
FLAMMABILITY	
<b>R</b>	<b>0</b>
REACTIVITY	
Style NC-L503R	
PERSONAL PROTECTION	

**SECTION 2 - HAZARDOUS INGREDIENTS/IDENTITY**

Hazardous Component(s) [chemical & common name(s)]	OSHA PEL	ACGIH TLV	Vapor Pressure mm Hg @ Temp	CAS NO.
*Perchloroethylene	100ppm	25ppm, 100 Stel	13 68	127-18-4
*Methylene Chloride, Dichloromethane	500ppm	50ppm, 1000 Ceil	420 77	75-09-2
Carbon Dioxide	10000ppm	5000ppm	38650 60	124-38-9

\*Indicates toxic chemical(s) subject to the reporting requirements of section 313 of Title III and of 40 CFR 372.

**SECTION 3 - PHYSICAL & CHEMICAL CHARACTERISTICS**

Boiling Point	104° - 250° F.	Specific Gravity (H <sub>2</sub> O=1)	1.51
Vapor Density (Air=1)	>1	Vapor Pressure (mm Hg)	See above
Solubility in Water	Nil	Evaporation Rate (N-Butyl Acetate=1)	Slower than ether
Appearance and Odor	Aerosol product; colorless liquid; mildly sweet		

**SECTION 4 - FIRE & EXPLOSION DATA**

Flash Point	None	Method Used	NA	Flammable Limits in Air % by Volume	LEL Lower 12	UEL Upper 19
Auto-Ignition Temperature	NA	Extinguisher Media	Foam, alcohol foam, CO <sub>2</sub> , dry chemical, water fog			
Special Fire Fighting Procedure	Water may be used to cool containers to prevent pressure buildup and explosion when exposed to extreme heat. If water is used, fog nozzles are preferred. Wear goggles and self-contained breathing apparatus.					

Unusual Fire and Explosion Hazards: Keep containers from heat and open flame. Closed containers may explode when exposed to extreme heat. Toxic gases and vapors (such as hydrogen chloride, phosgene, and carbon monoxide) may be released in a fire. Symptoms may not be readily apparent. Obtain medical attention.

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) BRAKE PARTS CLEANER, CHLORINATED(cont.)**

Stability  Unstable Conditions to Avoid Application to hot surfaces.  
 Stable

Incompatibility (Materials to Avoid) Unknown

Hazardous Decomposition Products May produce fumes when heated to decomposition. Fumes may contain carbon monoxide, chlorine, and hydrogen chloride.

Hazardous Polymerization  May Occur Conditions to Avoid  
 Will Not Occur

**SECTION 6 - HEALTH HAZARDS**

1. Acute Eye and skin irritant. Narcotic in high concentrations. 2. Chronic Liver and kidney disease. Skin irritation and dermatitis. Chronic overexposures have caused liver and kidney toxic effects in experimental animals. Can cause central nervous system effects, irregular heartbeat, and possible death if too much is breathed. Signs and Symptoms of Exposure Respiratory, skin, and eye irritation, headache, nausea, fatigue, drowsiness, impaired coordination, cardiac sensitization, dry and defatted skin. Deliberate concentration and inhalation of contents may be harmful or fatal. Can elevate carboxyhemoglobin levels following exposure.

Medical Conditions Generally Aggravated by Exposure Liver and kidney disease, anemia, coronary disease, rhythm disorders of heart.

Chemical Listed as Carcinogen or Potential Carcinogen National Toxicology Program Yes  No  I.A.R.C. Monographs Yes  No  OSHA Yes  No

This product contains chemicals known to the State of California to cause cancer.

Emergency and First Aid Procedures

ROUTES OF ENTRY

1. Inhalation Remove to fresh air. Administer oxygen if needed. Apply artificial respiration if breathing has stopped. Get medical attention. Do not administer adrenalin to an affected person.
2. Eyes Wash immediately with large volumes of fresh water for at least 15 minutes. Get medical attention.
3. Skin Wipe off with towel. Wash with soap and water. Get medical attention if irritation persists.
4. Ingestion Do not induce vomiting. Call a doctor. If conditions remain, get medical attention. Never give anything by mouth to an unconscious person.

**SECTION 7 - SPECIAL PRECAUTIONS AND SPILL/LEAK PROCEDURES**

Precautions to be Taken in Handling and Storage Store and use in cool, dry, well-ventilated areas. Avoid contact with hot metal surfaces. Keep away from excessive heat or open flame. Contents under pressure. Do not puncture or incinerate or store above 120° F.

Other Precautions The storage of non-flammable products with non-flammable pressurizing agent, in cartons, is the same as for ordinary canned goods in cartons.

Steps to be Taken in Case Material is Released or Spilled Avoid breathing vapors. Ventilate area. Dike area to contain spill. Clean up area with absorbent material and place in closed containers for disposal.

Waste Disposal Methods (Consult federal, state, and local regulations) Dispose of in accordance with local, state, and federal regulations. Before attempting cleanup, refer to other sections of this MSDS for hazard caution information.

**SECTION 8 - SPECIAL PROTECTION INFORMATION/CONTROL MEASURES**

Respiratory Protection (Specify Type) Restricted areas, use approved chemical/mechanical filters designed to remove both particles and vapor. Confined areas, use approved air line type respirator or hood. Use self-contained breathing apparatus for vapor concentrations above PEL/TLV limits.

Ventilation Sufficient to prevent inhalation of solvent vapors. General dilution and/or local exhaust ventilation in volume or pattern to keep PEL/TLV of most hazardous ingredient below acceptable limit and LEL below stated limit.

Protective Gloves Solvent resistant required for prolonged or repeated contact.

Other Protective Clothing or Equipment Safety glasses with splash guards or full face shield. Solvent resistant apron.

Work/Hygienic Practices Eye washes and safety showers in the workplace are recommended.