

Material Safety Data Sheet

May be used to comply with
OSHA's Hazard Communication Standard
29 CFR 1910.1200. Standard must be
consulted for specific requirements

U.S. Department of Labor

Occupation Safety and Health Administration
(Non-Mandatory Form)
Form Approved
OMB No. 1218-0072

IDENTITY

TC-450 COOLANT (160090)

Note: Blank spaces are not permitted. If any item is not applicable, or no information is available, the space must be marked to indicate that.

Section I

Manufactured For: Beaver Research Company		Emergency Telephone Number 1-800-255-3924 (Chem-Tel)
Address (Number, Street, City, State, and ZIP Code) 3700 E. Kilgore Road, Portage, MI 49002		Telephone Number For Information 269-382-0133
HMIS RATINGS: 4=Severe 1=Slight 3=High 0=Minimal 2=Moderate	Health: 2 Flammability: 0 Reactivity: 0 Special Protection:	Date Prepared 07/30/01 Signature of Preparer (optional)

Section II - Hazardous Ingredients/Identity Information

Hazardous Components (Specific Chemical Identity; Common Name(s))	CAS No.	OSHA PEL	ACGIH TLV	Other Limits Recommended	% (optional)
Potassium hydroxide	1310-58-3				1-5

To date there is no established OSHA exposure limit for Triethanolamine 99.

Section III - Physical/Chemical Characteristics

Boiling Point	212°F	Specific Gravity (H2O = 1)	1.096
Vapor Pressure (mm Hg)	N/A °F	% Volatile by Volume	60% as water
Vapor Density (AIR = 1)	>1	Evaporation Rate (Butyl Acetate = 1)	<1
Solubility in Water Complete	pH		
Appearance and Odor Light yellow, Clear liquid			

Section IV - Fire and Explosion Hazard Data

Flash Point (Method Used) None (ASTM D-56)	Flammable Limits N/A	LEL	UEL
Extinguishing Media CO², dry chemical, foam			
Special Fire Fighting Procedures This material as received will not support combustion, however its residues may. Therefore, procedures for an oil fire should be followed. Use self contained breathing apparatus. Use foam or dry chemical to extinguish fire. Water may be used ONLY to keep surrounding containers cool.			
Unusual Fire and Explosion Hazards			

Section V - Reactivity Data

Stability	Unstable	Conditions to Avoid	Sources of ignition.
	Stable	X	
Incompatibility (Materials to Avoid) Strong oxidizing or reducing agents.			
Hazardous Decomposition or Byproducts Oxides of Carbon, Hydrogen, and Nitrogen.			
Hazardous Polymerization	May Occur	Conditions to Avoid	
	Will Not Occur	X	

Section VI - Health Hazard Data

Route(s) of Entry: Inhalation? Skin? Ingestion?

Health Hazards (Acute and Chronic)

Skin: Tests on similar materials indicate that no significant adverse health effects are expected to occur with short term exposure. **Eyes:** Test on similar materials suggests that minimal irritation may occur on contact. **Ingestion:** Tests on similar materials indicate no significant adverse effects expected. Practically non-toxic. **Inhalation:** Tests on similar materials indicate no acute effects are expected.

Carcinogenicity: NTP? IARC Monographs? OSHA Regulated?

Signs and Symptoms of Exposure

Medical Conditions Generally Aggravated by Exposure

Emergency and First Aid Procedure

Eyes: Flush eyes immediately with water for at least 15 minutes or until irritation subsides. If irritation persists, consult a physician. **Skin:** Immediately remove soaked or contaminated clothing. Wash skin thoroughly with soap and water. Launder all contaminated clothing before reuse. If skin irritation or rash develops obtain medical assistance. **Ingestion:** Product is practically non-toxic. Do not induce vomiting. Obtain emergency medical attention. **Inhalation:** not likely to occur except as a mist. Move to fresh air and provide oxygen if necessary. Obtain emergency medical attention.

Section VII - Precautions for Safe Handling and Use

Steps to be Taken in Case Material is Released or Spilled

Shut off ignition sources. Absorb spillage with inert materials. Contain spill and keep from entering waterways or sewers. Advise EPA/state agency if required. Use personal protective equipment. Shovel, sweep or vacuum spill.

Waste Disposal Method

Follow federal, state and local regulations. Not a RCRA hazardous waste if uncontaminated. If "used" RCRA criteria must be determined. Do not flush into drain/storm sewer use an authorized disposal service. If permitted incineration may be practical. Recommend recycling.

Precautions to be Taken in Handling and Storage

Keep away from flames, sparks or hot surfaces. Never use a torch to cut or weld on or near container. Empty containers can contain explosive vapors. NFPA Class IIIB storage.

Other Precautions

Section VIII - Control Measures

Respiratory Protection (Specify Type)

Not required if adequate ventilation. If occupational exposure limits are exceeded wear NIOSH approved apparatus.

Ventilation	Local Exhaust	Special
	Mechanical(General)	Other

Protective Gloves

Acceptable materials for gloves are polyvinyl chloride; neoprene; polyvinyl alcohol; nitrile; viton

Eye Protection

Glasses or goggles. Have suitable eye wash water available

Other Protective Clothing or Equipment

If there is a likelihood of splashing, an oil resistant clothing should be worn. Never wear oil soaked clothing. Launder or dry clean before wearing. Discard oil soaked shoes.

Work/Hygienic Practices

Wash thoroughly after handling. Do not use gasoline, solvents, kerosene, or harsh abrasive skin cleaners for washing exposed skin areas. Take a shower after work if general contact occurs. Remove soaked clothing and launder before reuse. Launder or discard contaminated shoes and leather gloves.
