



Clore Automotive
 MSDS Sheet
VIPER No. 5090
 Cooling System Cleaner

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 Date: February 14, 2007

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SECTION 1: PRODUCT IDENTIFICATION

TRADE NAME	PRODUCT TYPE	CODE IDENTIFICATION	DOT SHIPPING NAME
Radiator Cleaner	Chelate Solvent, Surfactant	098-229	Cleaning Compound - not regulated

SECTION 2: HAZARDOUS INGREDIENTS

	CAS NUMBER	%	EXPOSURE CRITERIA
2 – Butoxyethanol	111-76-2	>10 250 ppm (Skin) OSHA	125 ppm (Skin) ACGIH
Tetra Sodium Ethylenediamine	64-02-8	<10 OSHA .051 PEL 2 mg/m3 NIOSH 250mg/m3	ACGIH-TLV
Ammonium Acetate	631-61-8	<10 10 mg/m3	ACGIH-TLV

NFPA Hazard HMIS:

4 = Extreme	Health =	1
3 = High	Stability =	0
2 = Moderate	Flammability =	1
1 = Slight	Special =	None 0
0 = Insignificant		

DOT Hazard Class: not regulated
EPA Hazard Waste Class: N.D.

SECTION 3: PHYSICAL DATA

Boiling Point: N/A	Melting Point:
Freezing Point: N/A	Vapor Pressure @: N.A.
Specific Gravity (Water=1): 1.135 @ 25°C	Solubility in Water: Complete
Vapor Density (AIR=1): Heavier than air	Evaporation Rate (BuAc=1): N.A.
% Volitiles By Volume: 58	
pH of 1% solution:	pH 100% =

Appearance & Odor: Transparent red liquid with ammonia odor

SYMPTOMS AND EFFECTS OF EXPOSURE: eye, skin and respiratory irritation

EYES: irritant	INGESTION: See Section 2 for chemicals
SKIN: irritant	INHALATION: Concentrated residue vapors may be irritating

SECTION 4: FIRE & EXPLOSION HAZARD DATA

FLASH POINT (& METHOD USED)	FLAMMABLE LIMITS IN AIR % BY VOLUME	AUTO IGNITION TEMPERATURE
Above 300° F	Lower: N.A. Upper: N.A.	N.A.

EXTINGUISHING MEDIA: Use water spray, carbon dioxide, dry chemical or universal-type foam applied by manufacturer in recommended technique.

SPECIAL FIRE FIGHTING PROCEDURES: Use self-contained breathing apparatus

UNUSUAL FIRE AND EXPLOSION HAZARD: None expected



SECTION 5: REACTIVITY DATA

STABILITY (Normal Conditions): Stable
CONDITIONS TO AVOID: Acids and oxidizing agents
INCOMPATIBILITY (Materials to Avoid): Acids and oxidizing agents
HAZARDOUS DECOMPOSITION PRODUCTS: N.D.
HAZARDOUS POLYMERIZATION: Will not occur

SECTION 6: HEALTH HAZARD INFORMATION

TOXITY INFORMATION: see Section 2 for individual chemical concerns
EFFECTS OF OVEREXPOSURE: eye, skin irritation
EMERGENCY AND FIRST AID PROCEDURES:
EYE: Flush with fresh water for at least 15 minutes. Apply eye wash. Seek medical attention.
SKIN: Flush with water for 15 minutes. Apply skin lotion. Seek medical attention.
INGESTION: Give 3 or 4 glasses of milk or water and contact a physician. DO NOT induce vomiting.
INHALATION: Seek fresh air

SECTION 7: SPECIAL PROTECTION INFORMATION

VENTILATION REQUIREMENTS: Sufficient to below 25 ppm
RESPIRATORY PROTECTION (Specify Type): Respirator or mask
EYE PROTECTION: Recommended
GLOVES: Recommended
OTHER PROTECTIVE CLOTHING AND EQUIPMENT: None required

SECTION 8: SPILL OR LEAK PROCEDURES

Steps To Take If Material Is Released Or Spilled: Contain spill – mop up or rinse to drain

SECTION 9: SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:
KEEP OUT OF REACH OF CHILDREN. Harmful or fatal if swallowed, skin and eye irritant. Avoid contact with eyes and skin and breathing accumulated vapors. Store in a cool, dry area and protect from freezing. Keep container tightly closed when not in use.

The information accumulated herein is believed to be accurate but is not warranted to be whether originating with manufacturer or not. Recipients are advised to confirm, in advance of need, that the information is current, applicable, and suitable to their circumstances.