

VETERAN BRAND

HD EMULSIFYING DETERGENT DETERGENTE QUE EMULSIONA

Introducing Cavalier, Inc.'s **Leading Edge Heavy-duty Emulsifying Detergent**, a highly concentrated general purpose cleaner designed to remove grease, oil, wax, and carbon deposits from industrial machinery and equipment.

Excellent for use on bilges, tires, floors, painted surfaces, and most metal surfaces including brass, cadmium, copper, stainless steel, and aluminum.

Water-based formula is non-caustic, non-toxic, and completely biodegradable.

DIRECTIONS FOR APPLICATION

LIGHT DUTY CLEANING: Prepare a solution of 2 ounces Leading Edge HD Emulsifying Detergent per gallon of water.

HEAVY-DUTY CLEANING: Use 8 ounces of the detergent per gallon of water and apply a liberal amount of the solution onto the surface and allow it to stand and penetrate into the soil for a few minutes. Brush or scrub surface with a stiff-bristled brush. Pick-up solution with an automatic scrubber, mop, or wet/dry vacuum. Rinse thoroughly with plenty of clean water.

PRESSURE WASHERS: When used in conjunction with electric and pneumatic pressure washers, the spray nozzle will need to be adjusted to allow 1 part concentrate to mix with 30 parts water. Depending on soil conditions, a more concentrated solution and increased setting times should be used.

HD Emulsifying Detergent is available in 1 and 5 gallon containers.

Stock# 997357
Unit: 4/1 gal./case
NSN#: 7930-01-508-2123
SHML- AUTHORIZED

Stock# 997322
Unit: 5 Gallon Pail
NSN#: 7930-01-508-2120
SHML- AUTHORIZED

PRODUCT SPECIFICATIONS

Odor	Characteristic	Solubility	Complete with H ₂ O
pH	11.0-12.0	Emulsification	Excellent
Viscosity	Water thin	Flash Point	None (H ₂ O)
Foam	Moderate	Biodegradability	Complete
Abrasives	None	Weight per gallon	8.47 lbs/gal



Cavalier Inc.

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www.cavalierva.com

MATERIAL SAFETY DATA SHEET

Prepared by: Regulatory Affairs Dept.

(Prepared According to 29 CFR 1910.1200)

N/A= Not Applicable
Effective Date: 10/03 Revision: n/a

SECTION 1-PRODUCT IDENTIFICATION AND SUPPLIER INFORMATION

Product Name: Leading Edge HD Emulsifying Detergent
Generic Name: High Performance Industrial Degreaser
Chemical Family: Detergent/solvent blend
Formula: Proprietary

Supplier Name: Cavalier, Inc.
Supplier Address: PO Box 11171 Norfolk, Va.
Phone: 757-855-6091
Supplier Phone: Fax: 757-855-1818

SECTION 2-INGREDIENT INFORMATION

CHEMICAL NAME	CAS NO.	WT. %	PEL	TWA-TLV	STEL-TLV
Water	7732-18-5	to 100			
Tetrasodium EDTA	64-02-8	0 to 5			
Nonionic Surfactant	9016-45-9	0 to 5		Not Hazardous	
Amphoteric Surfactant	88895-48-1	0 to 5		Not Hazardous	
Sodium Metasilicate	6834-92-0	0 to 5			
Propylene Glycol N-Butyl Ether	5131-66-8	0 to 5		Not Hazardous	
Dipropylene Glycol Methyl Ether	34590-94-8	0 to 5		Not Hazardous	

SECTION 3-PHYSICAL DATA

Boiling Point (°F): 212° F.
Vapor Pressure: <20mm Hg @68°F.
% Volatile: 80+
Solubility in Water: Complete
Physical Description: Thin clear liquid with characteristic odor

Specific Gravity: 1.020
Vapor Density (Air=1): >1
pH: 12.0 – 12.8
Evaporation Rate (Water=1): >1

SECTION 4-FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used): None
Upper Explosion Limit: N/A
Lower Explosion Limit: N/A
Extinguishing Media: N/A
Special Firefighting Procedures: Non Flammable
Unusual Fire and Explosion Hazards: N/A

SECTION 5-REACTIVITY DATA

Stability: Stable
Hazards Decomposition Products: Alkaline vapors in a fire.

Hazardous Polymerization: None
Incompatibility (Materials to Avoid): Strong Acids, oxidizers, Chlorine

SECTION 6-STORAGE AND HANDLING INFORMATION

Keep out of reach of children. For use by trained personnel only. Wear protective gloves and eyewear when handling. Keep container closed during storage. For institutional and industrial use only. Avoid contact with eyes, skin and clothing. Avoid breathing of vapors or mists. Use in well-ventilated area.

SECTION 7-HEALTH HAZARDS AND FIRST AID

Effects of Overexposure:
Skin: May cause irritation with prolonged or repeated contact (dryness, redness)
Eyes: Eye irritant. May cause conjunctivitis or possible irreversible damage.
Inhalation: Mists may be irritating to mucous membranes in the nose, throat, and lungs.
Ingestion: Irritating to the mouth and throat. May cause headache, nausea, abdominal pain.
First Aid Procedures:

Skin: Flush with water. Seek medical attention if irritation persists.
Eyes: Flush with large quantities of water, holding eyelids open. Seek medical attention immediately.
Inhalation: Get to fresh air. Seek medical attention if irritation persists.
Ingestion: Do not induce vomiting. Drink large quantities of water. Seek medical attention immediately.

SECTION 8-SPECIAL PROTECTION INFORMATION

Respiratory Protection: NIOSH/MSHA approved organic vapor canister.
Ventilation Requirements: Provide mechanical exhaust when misting of product is present.
Protective Gloves: Rubber or other chemical resistant.
Eye Protection: Safety glasses or chemical splash goggles.
Other Protective Equipment: Eyewash station nearby. Wear protective outer-wear when danger of mist contact may occur. Protective rubber boots should be worn.

SECTION 9-SPILL OR LEAK PROCEDURES

Steps to be taken in Case Material is Released or Spilled: Floors will become slippery. Avoid walking in product. Ventilate area well. Keep unessential personnel away. Mop up or otherwise absorb and hold disposal. Avoid discharge to sewer or open waterways.
Waste Disposal Method: Any method in accordance with local, state and federal laws. Best method is to recycle or reuse for intended purpose. Consult local authorities for disposal in public sewer. Do not dispose of into storm drain, stream, river or to ground. Rinse container thoroughly before discarding in trash.

SECTION 10-REGULATORY INFORMATION

SARA Title III - Section 311/312 -Hazard Categories:

- No - Fire Hazard
- No - Sudden Release of Pressure Hazard
- No - Reactivity Hazard
- Yes - Immediate (acute) Health Hazard
- No - Delayed (chronic) Health Hazard

Shipping Information:

- FOR CONTAINERS > 1 Gallon : Cleaning Compound
- FOR 1 GALLON CONTAINERS : Cleaning Compound
- FOR CONTAINERS < 1 GALLON : Cleaning Compound

HMIS Hazardous Materials

Identification System

Health	2
Flammability	0
Reactivity	0
Personal Protection	B

FOR EMERGENCY MEDICAL OR TRANSPORT INFORMATION: CHEM-TEL, Inc. @ 800-255-3924 (24 hours, 7 days per week)

This product contains the following toxic chemical(s) subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 and of 40 CFR 372.

CAS#	Chemical Name	Percent by Weight
	None	

This product contains the following chemical(s) which have been established to be either a carcinogen or suspected carcinogen.

CAS#	Chemical Name	Percent by Weight
	None	

SECTION 11-OTHER INFORMATION

This company cannot anticipate all conditions of handling and use of this product. Therefore, this company accepts no responsibility for results obtained by the application of this information, or the safety and suitability of our products either alone or in combination with other products. It is the responsibility of the user to provide a safe workplace, using the health and safety information contained herein as a guide. This company will accept no liability for damages or loss incurred from the improper handling and use of this product