



5332 Dansher Road
Countryside, Illinois 60525

MATERIAL SAFETY DATA SHEET

Revision Date: 8/15/2005

MSDS No. N-287

Emergency Phones: 708-579-8100 (NYCO)

800-424-9300 (CHEMTREC)

PLEASE NOTE: This MSDS is being provided to your company for the purpose of providing current health and safety information to your management and for your employees who work with this material. Please read the information on these sheets, and then provide this information to those people at your company whose responsibility it is to comply with FEDERAL and STATE RIGHT-TO-KNOW regulations. Also make this information available to any employee who requests it. It is your obligation to comply with these regulations.

SECTION I - PRODUCT IDENTITY

PRODUCT NAME: HD Force

Formula: Mixture of sodium hydroxide, detergents, solvents, and inorganic builders in water.

HMIS RATINGS

Health = 2 (Moderate)	Flammability = 1(Slight)
Reactivity = 0 (Minimal)	Protection = B (Safety Glasses, Gloves)

SECTION II - HAZARDOUS INGREDIENTS

	<u>PERCENT</u>	<u>TLV</u>	<u>CARCINOGEN</u> <u>(OSHA,TP,IARC)</u>
Sodium Hydroxide (CAS No. 1310-73-2)	< 1%	2 mg/m3 Ceiling	No
2-Butoxyethanol (CAS No. 11176-2)	4-6 %	25 ppm	
Monoethanolamine (CAS No. 141-43-5)	4-6 %	3 ppm	No

SECTION III - CHEMICAL AND PHYSICAL

Appearance: Clear Red Liquid	Boiling Point: 212 ° F.
Odor: Citrus	Melting Point: N/A
pH: 12.5 - 13.5	Spec. Gravity (H ₂ O = 1): 1.025
Water Solubility: Complete	Vapor Pressure (mm Hg): N/A
Viscosity, Cp. @ 25°C: Water Thin	VOC Content: 5.3 %

SECTION IV - FIRE AND EXPLOSION HAZARDS

Flash Point (Method): None	Explosion Limits: Upper: N/A Lower: N/A
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Extinguishing Media: Not Flammable.

Special Firefighting Procedures and Hazards: Avoid skin and eye contact and breathing of vapors. Wear head and body protection and alkali respirator if exposure to liquid is likely. Fire waters may become corrosive with product contact.

SECTION V - REACTIVITY INFORMATION

Stable: Unstable:

Precautions:

Incompatibility: Strong acids, materials not resistant to alkalis, active metals (zinc, aluminum, magnesium, etc.)

Hazardous Decomposition Products: Flammable hydrogen gas.

Hazardous Polymerization: Occurs: Does Not Occur: x

SECTION VI - HEALTH HAZARDS - PROTECTIVE MEASURES - FIRST AID

- Inhalation:** Breathing of mist can cause respiratory irritation or burns. Wear approved alkali mist respirator if exposure is likely. Remove to fresh air. Give artificial respiration or oxygen if needed and get prompt medical attention.
- Skin:** Corrosive! Extended contact may cause irritation. Prolonged contact with 2-butoxyethanol may result in the absorption of potentially harmful amounts leading to possible liver and kidney damage. Flush skin with water for 15 minutes. Wear protective gloves if needed. Get medical attention for any irritation.
- Eyes:** Corrosive! Causes eye damage. Wear splash proof goggles. Provide convenient eyewash stations. Flush immediately with water for 15 minutes and get prompt medical attention.
- Ingestion:** Corrosive! Causes irritation and burning in mouth, esophagus, throat and stomach. Avoid swallowing. Drink a lot of water or preferably milk. Get medical attention if effects persist. Do not induce vomiting.

Most likely routes of entry: Eyes, skin, and ingestion.

Other Important Medical or Precautionary Information: None

SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE

- Spills and Leaks: Small spills can be flushed into normal drainage or into ground with copious amounts of water or taken up with absorbent material. Larger spills should be contained by dike or other methods and hold for collection and/or reuse or for neutralization with acid before collection and disposal. People should use eye and skin protection and respirator.
- Storage and Handling: Check daily for any leaks from containers, vessels, pumps, and piping. Do not heat above 165° F and keep away from heat and ignition sources.
- Waste Disposal: May be disposable in sewers if diluted and if local regulations permit. Otherwise send to licensed treatment and disposal well before handling and disposal. Observe label precautions.
- Empty Containers: Rinse well before handling and disposal. Observe label precautions.
- Other Precautions: N/A
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SECTION VIII - REGULATORY INFORMATION

Reportable for SARA Title III, S.313 (Form R): 2-Butoxyethanol

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