



7818 DEPOT LANE, TAMPA, FL 33637

FOR 24 HOUR EMERGENCY: CALL CHEM*TEL 1-800-255-3924

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C.A.S. NO.: Mixture Proprietary

REVISION DATE: October 10, 2007

MATERIAL SAFETY DATA SHEET

1. PRODUCT IDENTIFICATION

TRADE NAME: Heavy Duty Wax Remover

DOT SHIPPING NAME: Ethanolamine Solutions

DOT/UN ID NO.: UN 2491

DOT CLASS: 8

LABEL REQUIRED: Corrosive

PACKING GROUP: III

2. INFORMATION ON HAZARDOUS INGREDIENTS

MATERIAL	C.A.S. NO.	STEL-ACGIH	TWA-OSHA	STEL-OSHA	TWA-ACGIH
Ethanol, 2-amino-	141-43-5	6 ppm	3 ppm	6 ppm	3 ppm
Ethylene Glycol Butyl Ether	111-76-2	N/A	25 ppm	N/A	25 ppm

3. HAZARDS IDENTIFICATION

POTENTIAL HEALTH EFFECTS:

EYES: Causes irritation, experienced as pain, with excess blinking and tear production and seen as extreme redness and swelling of the eye and chemical burns of the eye. Severe eye damage may cause blindness.

SKIN: Causes severe irritation with pain, severe excess redness and swelling with chemical burns, blister formation and possible tissue destruction. Other than the potential skin irritation effects noted above, acute (short term) adverse effects are not expected from brief skin contact; see other effects, below and Section 11 for information regarding long term effects.

INHALATION: Vapors or mist, especially as generated from heating the material or as from exposure in poorly ventilated areas or confined spaces, are irritating and cause nasal discharge, coughing and discomfort in nose and throat. Prolonged or repeated overexposure may result in lung damage and central nervous system (CNS) depression. Inhalation may cause giddiness, dizziness, drowsiness, euphoria, loss of coordination, disorientation, confusion, drunken behavior, tiredness, headache, nausea and vomiting. In extreme cases, symptoms of central nervous system (CNS) depression include stupor, convulsions, unconsciousness, coma and even death. In poorly ventilated areas or confined spaces, unconsciousness and asphyxiation may result. Prolonged or repeated overexposure may result in the absorption of potentially harmful amounts of material.

INGESTION: Causes burning of mouth, throat and stomach with abdominal and chest pain, nausea, vomiting, diarrhea, thirst, weakness, collapse and central nervous system (CNS) depression. In extreme cases, symptoms of central nervous system (CNS) depression include stupor, convulsions, unconsciousness, coma and even death. Aspiration may occur during swallowing or vomiting, resulting in lung damage.

4. FIRST AID MEASURES

EYES: Immediately flush eyes with large amounts of running water for at least 15 minutes. Hold eyelids apart while flushing to rinse entire surface of eye and lids with water. Do not attempt to neutralize with chemical agents. Obtain medical attention immediately. Continue flushing for an additional 15 minutes if medical attention is not immediately available.

SKIN: Immediately remove contaminated clothing and shoes. Under a safety shower, flush skin thoroughly with large amounts of running water for at least 15 minutes. Do not attempt to neutralize with chemical agents. Get medical attention immediately. Discard or decontaminate clothing and shoes before reuse.

INGESTION: If person is conscious and can swallow, immediately give two glasses of water (16 oz.) but do not induce vomiting. This material is corrosive. If vomiting occurs, give fluids again. Have a physician determine if condition of patient will permit induction of vomiting or evacuation of stomach. Do not give anything by mouth to an unconscious or convulsing person.

INHALATION: If inhaled, remove to fresh air. If not breathing or in respiratory distress, clear victim's airway and start artificial respiration, preferably mouth to mouth. With a physician's advice, give supplemental oxygen using a bag-valve mask or manually

triggered oxygen supply.

OTHER INSTRUCTIONS: Swallowing of this corrosive material may result in severe ulceration, inflammation and possible perforation of the upper alimentary tract, with hemorrhage and fluid loss. Aspiration of this product during induced emesis can result in severe lung injury. If evacuation of stomach is necessary, use method least likely to cause aspiration, such as gastric lavage after endotracheal intubation. Contact a Poison Control Center for additional treatment information.

5. FIRE FIGHTING MEASURES

FLASH POINT: 150° F (TCC)

FLAMMABLE LIMITS %: Lower: 1.1 Upper: 10.6

EXTINGUISHING MEDIA: Use water spray, dry chemical, foam or carbon dioxide to extinguish flames. Use water spray to cool fire-exposed containers. Water or foam may cause frothing.

SPECIAL FIRE FIGHTING PROCEDURE: Prevent human exposure to fire, fumes, smoke and products of combustion. Evacuate non-essential personnel. Wear special chemical protective clothing and positive pressure self-contained breathing apparatus (SCBA). Approach fire from upwind to avoid hazardous vapors and toxic decomposition products. Decontaminate or discard any clothing that may contain chemical residues.

UNUSUAL FIRE EXPLOSION HAZARD: None currently known.

AUTO IGNITION TEMPERATURE: N.D.

HAZARDOUS DECOMPOSITION PRODUCTS: Toxic levels of ammonia, combustion products of nitrogen, carbon monoxide, carbon dioxide, irritating aldehydes and ketones may be formed on burning in a limited air supply.

6. ACCIDENTAL RELEASE MEASURES

Evacuate non-essential personnel, eliminate ignition sources, ventilate area avoid breathing vapor and wear protective equipment (see Section 8) including appropriate respiratory equipment. Shut off source of leak only if safe to do so. Contain spill. Recover free product. To clean up residue, use an absorbent. Avoid runoff to ground water, surface waters and sewers. It may be necessary to remove contaminated soil. Use non sparking tools. If required, notify state and local authorities.

7. HANDLING AND STORAGE

Minimal feasible handling temperatures should be maintained. Eye wash and safety shower should be available nearby when this product is handled or used.

This product is combustible. Flash point is less than 200° F. Keep liquid and vapor away from oxidizers, heat, sparks and flame. No smoking where material is used or stored. Surfaces that are sufficiently hot may ignite even liquid product in the absence of sparks or flame. Extinguish pilot lights, cigarettes and turn off other sources of ignition prior to use and until all vapors are gone. Vapors may accumulate and travel to ignition distant from the handling site; flash-fire can result. Keep containers closed when not in use. Use with adequate ventilation. Static electricity may accumulate and create a fire hazard. Ground fixed equipment. Bond and ground transfer equipment. Contact with oxidizers may result in a fire and/or explosion. Containers, even those that have been emptied, can contain explosive vapors. Do not cut, drill, grind, weld or perform similar operations on or near containers.

8. EXPOSURE CONTROLS, PERSONAL PROTECTION

RESPIRATORY PROTECTION: Airborne concentrations should be kept to lowest levels possible. If vapor, mist or dust is generated and the occupational exposure limit of the product, or any component of the product, is exceeded, use appropriate NIOSH or MSHA approved air purifying or air supplied respirator after determining the airborne concentration of the contaminant. Air supplied respirators should always be worn when airborne concentration of the contaminant or oxygen content is unknown.

VENTILATION REQUIREMENTS: Adequate to meet occupational exposure limits (see Section 2).

EYE PROTECTION: Avoid eye contact. Chemical type goggles with face shield must be worn. Do not wear contact lenses.

SKIN PROTECTION: Protective clothing such as coveralls or lab coats must be worn. Launder or dry-clean when soiled. Gloves resistant to chemicals and petroleum distillates required. When laundering large quantities, impervious suits, gloves and rubber boots must be worn. Remove and dry-clean or launder clothing soaked or soiled with this material before reuse. Dry cleaning of contaminated clothing may be more effective than normal laundering. Inform individuals responsible for cleaning of potential hazards associated with handling contaminated clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

BOILING POINT: > or = 340° F
VAPOR PRESSURE (MM Hg): N.D.
VAPOR DENSITY (AIR = 1): 3.1
SPECIFIC GRAVITY (H₂O = 1): 0.93
DENSITY (LB/GAL): 7.8
PERCENT VOLATILE BY VOLUME (%): 100
MELTING POINT: N/A
EVAPORATION RATE (Butyl Acetate = 1): N.D.
SOLUBILITY IN WATER: Infinite
pH: 9.5

10. STABILITY AND REACTIVITY

CHEMICAL STABILITY: Reacts violently to acids.
HAZARDOUS POLYMERIZATION: Will not occur.
HAZARDOUS DECOMPOSITION PRODUCTS: Toxic levels of ammonia, combustion products of nitrogen, carbon monoxide, carbon dioxide, irritating aldehydes and ketones may be formed on burning in a limited air supply.
KEEP AWAY FROM: Acids, strong alkalis, strong oxidizing agents, heat, heated surfaces, static electricity, electric arcs, sparks and flames.

11. TOXICOLOGICAL INFORMATION

ANIMAL TOXICITY DATA

ORAL:
LD50 Believed to be > 1.00 - 2.00 g/kg (rat) moderately toxic.
INHALATION:
Not determined.
DERMAL:
LD50 1.00 g/kg (rabbit) slightly toxic

IRRITATION INDEX, ESTIMATION OF IRRITATION (SPECIES)

SKIN:
(Draize) Believed to be > 6.5 - 8.00/8.0 (rabbit) corrosive
EYES:
(Draize) Believed to be > 80.00 - 110.00/110 (rabbit) extremely irritating
SENSITIZATION:
Not Determined.

OTHER

Prolonged or repeated ingestion of monoethanolamine has caused kidney and liver damage in laboratory animals. In addition, a developmental toxicity study, using unconventional statistical treatment of the data, demonstrated developmental toxicity in rats. The true significance of the study data is not clear, since a full re-interpretation of this data is not possible at this time. Additional or repeated studies are planned or underway to better define the toxic potential of this product or its components, or to verify the results obtained from previous animal studies.

12. ECOLOGICAL INFORMATION

AQUATIC TOXICITY:

LC50-96hr Aquatic toxicity rating is > 100.00 - 1000.00 ppm practically non-toxic.

MOBILITY:

This product is expected to be mobile in soil and not be expected to adsorb to suspended solids or sediments in water.

PERSISTENCE AND BIODEGRADABILITY:

This product undergoes moderate biodegradation and is not expected to be persistent in the environment.

POTENTIAL TO BIOACCUMULATE:

This product is not expected to bioaccumulate. $K_{OW}=1.31$

REMARKS:

None.

13. DISPOSAL CONSIDERATIONS

Material that cannot be used should be disposed of at an approved facility in accordance with any applicable regulations under the Resource Conservation and Recovery Act. NOTE: State and local regulations may be more stringent than Federal.

Dispose of empty containers according to any applicable regulations under the Resource Conservation and Recovery Act. NOTE: State and local regulations may be more stringent than Federal.

Empty containers may contain residual material. Do not reuse containers unless properly reconditioned.

14. TRANSPORTATION INFORMATION

DOT SHIPPING NAME: Ethanolamine Solution

DOT HAZARD CLASS: 8

UN/NA NUMBER: 2491

PACKING GROUP: III

DOT LABEL: Corrosive

DOT PLACARD: Corrosive

15. REGULATORY INFORMATION

SARA Title III:

Section 302/304 Extremely Hazardous Substances

None.

SARA Title III:

Section 311 Hazardous Categorization

Acute

Chronic

Fire Hazard

SARA Title III:

Section 313 Toxic Chemical

Component

Glycol Ether

Amount

<= 65.000%

CERCLA 102(a)/DOT Hazardous Substances:

None

CERCLA 103

This product contains Glycol Ether(s) which, although included as a broad category on the CERCLA hazardous substance list, has not been assigned a reportable quantity.

TSCA Inventory Status

This product, or its components, are listed on or are exempt from the Toxic Substance Control Act (TSCA) Chemical Substance Inventory.

States Right-to-Know Regulations:

Component Chemical Name

State Right-to-Know

Ethylene glycol monobutyl ether
Ethanol, 2-amino-

Massachusetts, Pennsylvania
Connecticut, Florida, Illinois, Massachusetts, New Jersey, Pennsylvania,
Rhode Island

California Proposition 65:

The following detectable components of this product are substances, or belong to classes of substances, known to the State of California to cause cancer and/or reproductive toxicity.

None.

WHMIS Classification:

Class E: Corrosive

Canadian Inventory Status:

This product, or its components, are listed on or are exempt from the Canadian Domestic Substance List (DSL).

EINECS Inventory Status:

This product, or its components, are listed on or are exempt from the European Inventory of Existing Chemical Substances (EINECS) or the European List of Notified Chemical Substances (ELINCS).

16. OTHER INFORMATION

HEALTH	FLAMMABILITY	REACTIVITY	SPECIAL HAZARD
3	2	0	X

(Degree of hazard: 0 = No Hazard, 4 = Severe Hazard)

USERS RESPONSIBILITY: A bulletin such as this cannot be expected to cover all possible individual situations. As the user has the responsibility to provide a safe workplace, all aspects of an individual operation should be examined to determine if, or where, precautions - in addition to those described herein - are required. Any health hazard and safety information herein should be passed on to your customers or employees, as the case may be.

DISCLAIMER OF LIABILITY: The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by use of this material. All chemicals may present unknown health hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist. Final determination of suitability of the chemical is the sole responsibility of the user. No representations or warranties, either expressed or implied, of merchantability, fitness for a particular purpose or any other nature are made hereunder with respect to the information contained herein or the chemical to which the information refers. It is the responsibility of the user to comply with all applicable federal, state and local laws and regulations.

< = Less Than

> = More Than

N/A = Not Applicable or Not Available

ND = Not Determined