

Material Safety Data Sheet

Effective Date: 27-JUL-2000  
Product: BLENDX VHC

I. IDENTIFICATION

Chemical Name: MIXTURE OF SURFACTANTS  
Chemical Family: SURFACTANT/COMPATABILITY AGENT  
Formula: NOT APPLICABLE  
Synonyms: NONE  
CAS Number: SEE OTHER PRECAUTIONS, SECTION IX.  
EPA Number: NOT REQUIRED

II. PHYSICAL DATA

Boiling Point: NOT DATA AVAILABLE  
Freezing Point: <40 DEGREES F.  
Spec Gravity: 1.121 GMS/CC  
Vapor Pressure: NO DATA AVAILABLE  
Vapor Density: NO DATA AVAILABLE  
Solubility: 100% @ 25 DEGREES C.  
Volatiles: NOT APPLICABLE  
Evaporation: NOT APPLICABLE  
Melting Point: NO DATA AVAILABLE  
Appearance: CLEAR AMBER LIQUID WITH SURFACTANT ODOR.

III. INGREDIENTS

Material	CAS Number	Percent	TLV	Hazard
ALKYL ARYL POLYETHOXY ETHANOL, PHOSPHATE ESTERS AND OTHER ETHOXYLATED DERIVATIVES COMPONENTS INEFFECTIVE AS A SPRAY ADJUVANT		90.00	NOT ESTABLI SHED	MODERATE EYE IRRITANT
		10.00	NOT ESTABLI SHED	NOT AVAILABLE

IV. FIRE AND EXPLOSION HAZARD

Flash Point: >200 DEGREES F  
Autoignition Temp: NO DATA AVAILABLE  
Flammable Limit: NOT APPLICABLE  
Extinguishing Media: DRY CHEMICAL, WATERSPRAY, WATERFOG, CARBON  
DIOXIDE, FOAM, SAND OR EARTH,  
Special Fire Fight Proc: FIREFIGHTERS MUST BE EQUIPPED TO PREVENT  
BREATHING OF VAPORS OR PRODUCTS OF COMBUSTION.  
WEAR AN APPROVED SELF-CONTAINED BREATHING  
APPARATUS AND PROTECTIVE CLOTHING.  
Fire and Expl Hazard: COMBUSTIBLE LIQUID, CONTAINERS MAY EXPLODE IN

Material Safety Data Sheet

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HEAT OF FIRE. PRODUCT MAY PRODUCE TOXIC AND IRRITATING FUMES AND VAPORS UNDER FIRE CONDITIONS. USE WATER SPRAY TO COOL EXPOSED CONTAINERS.

V. HEALTH HAZARD

Carcinogen Information: NONE CURRENTLY KNOWN

ACUTE EFFECTS OF OVER EXPOSURE

Swallowing: MODERATELY TOXIC. MAY CAUSE HEADACHE, DIZZINESS, INCOORDINATION, NAUSEA, VOMITING, DIARRHEA, AND GENERAL WEAKNESS.  
Skin Absorption: PENETRATES SKIN READILY. FREQUENT OR WIDESPREAD CONTACT MAY RESULT IN THE ABSORPTION OF POTENTIALLY HARMFUL AMOUNTS.  
Inhalation: HIGH CONCENTRATIONS ARE IRRITATING TO THE EYES AND RESPIRATORY TRACT.  
Skin contact: MAY CAUSE SKIN IRRITATION WITH PROLONGED CONTACT.  
Eye Contact: MAY CAUSE MODERATE IRRITATION AND POSSIBLE CORNEAL INJURY.  
Chronic Effects: REPEATED OVEREXPOSURE MAY CAUSE HEMOLYSIS OF RED BLOOD CELLS LEADING TO POSSIBLE LIVER AND KIDNEY DAMAGE.  
Other Hazard: NONE CURRENTLY KNOWN

EMERGENCY AND FIRST AID PROCEDURES

Swallowing: DO NOT INDUCE VOMITING. OBTAIN MEDICAL ATTENTION IMMEDIATELY.  
Skin: WASH SKIN THOROUGHLY WITH SOAP AND WATER. IF IRRITATION DEVELOPS, CONSULT A PHYSICIAN.  
Inhalation: MOVE VICTIM TO FRESH AIR. IF BREATHING BECOMES DIFFICULT, GIVE OXYGEN AND CALL A PHYSICIAN.  
Eyes: IMMEDIATELY FLUSH EYES WITH LARGE QUANTITIES OF WATER FOR AT LEAST 15 MINUTES AND CALL A PHYSICIAN.  
Notes to Physician: IN THE EVENT OF AN ADVERSE RESPONSE, TREATMENT SHOULD BE DIRECTED TOWARD CONTROL OF THE SYMPTOMS.

VI. REACTIVITY

Stability: Stable  
Conditions to Avoid: EXCESSIVE HEAT AND OPEN FLAMES.

Material Safety Data Sheet

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Polymerization: Will Not Occur  
Conditions to Avoid: NONE CURRENTLY KNOWN.  
Incompatibility material: STRONG OXIDIZERS SUCH AS HYDROGEN PEROXIDE,  
BROMINE, AND CHROMIC ACID.  
Hazardous Combustion: CARBON MONOXIDE, CARBON DIOXIDE AND OXIDES OF  
PHOSPHOROUS FROM BURNING.  
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VII. SPILL OR LEAK PROCEDURES

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Spill or Leak Proc: DIKE AND ABSORB SPILL WITH AN ABSORBENT SUCH AS  
CLAY, SAND, OR SAWDUST. TRANSFER TO SUITABLE  
CONTAINERS FOR PROPER DISPOSAL. FLUSH SPILL  
AREA WITH WATER, ABSORB AND PLACE IN SAME  
CONTAINERS WITH OTHER MATERIAL.  
Waste Disposal Method: THIS MATERIAL MUST BE DISPOSED OF ACCORDING TO  
FEDERAL, STATE, OR LOCAL PROCEDURES UNDER THE  
RESOURCE CONSERVATION AND RECOVERY ACT.  
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VIII. SPECIAL PROTECTION INFORMATION

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Respiration: USE NIOSH/OSHA APPROVED RESPIRATOR WITH ORGANIC  
VAPOR CARTRIDGE IF VAPOR CONCENTRATION EXCEEDS  
PERMISSIBLE TLV.  
Ventilation: MECHANICAL  
Gloves: IMPERVIOUS GLOVES.  
Eyes: CHEMICAL SAFETY GOGGLES.  
Other: EYE WASH STATION, IMPERVIOUS APRON AND  
FOOTWEAR.  
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IX. SPECIAL PRECAUTIONS

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Special precaution: KEEP OUT OF REACH OF CHILDREN. DO NOT STORE  
WITH FOOD, FEED, OR OTHER MATERIAL TO BE USED  
OR CONSUMED BY HUMANS OR ANIMALS. DO NOT  
CONTAMINATE WATER SUPPLIES, LAKES, STREAMS, OR  
PONDS. STORE BETWEEN 40 DEGREES F. AND 120  
DEGREES F. DO NOT STORE WITH OXIDIZING  
MATERIALS.  
Other precaution: ETHYLENE OXIDE MAY ACCUMULATE IN THE HEAD SPACE  
OF DRUM AND BULK CONTAINERS HOWEVER, THE  
CONCENTRATION OF ETHYLENE OXIDE IN THE HEAD  
SPACE SHOULD NOT CAUSE THE OSHA 0.5 PPM ACTION  
LEVEL FOR ETHYLENE OXIDE EXPOSURE TO BE  
EXCEEDED. ETHYLENE OXIDE IS LISTED AS A  
POTENTIAL CARCINOGEN BY OSHA, NTP, IARC AND  
CALIFORNIA PROP 65. THE TRACE AMOUNTS OF

Helena Chemical Company  
PH: 901-761-0050  
CHEMTREC: 800-424-9300

24-MAY-2002 15:20:25  
Page 4 Of 4

Material Safety Data Sheet

Effective Date: 27-JUL-2000  
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ETHYLENE OXIDE ARE NOT EXPECTED TO RESULT IN  
ACUTE OR CHRONIC HAZARDS.

THIS PRODUCT CONTAINS THE FOLLOWING CHEMICALS  
SUBJECT TO THE REPORTING REQUIREMENTS OF  
SECTION 313 OF TITLE III OF THE SUPERFUND  
AMENDMENTS AND REAUTHORIZATION ACT OF 1986:  
PHOSPHORIC ACID, CAS #7664-38-2, 02.00-04.00%  
BY WT.  
DIETHYLENE GLYCOL MONOBUTYL ETHER, CAS #112-34-  
5, 14.00% BY WT.

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X. SHIPPING INFORMATION  
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Shipping name: NOT REGULATED BY DOT, IATA, OR IMCO.  
Hazard Class: NONE  
Identification No: NONE  
Labels Required: NONE REQUIRED  
Placarding: NONE REQUIRED  
Freight Class: ADJUVANT, SPREADER OR STICKER, LIQUID, NOIBN

Chemical Name	Equivalent R.Q.
----- NOT APPLICABLE	----- NOT APPLICABLE

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XI. GENERAL PRODUCT INFORMATION  
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National Fire Protection Association Rating:  
(Rating level: 4-Extreme, 3-High, 2-Moderate, 1-Slight, 0-Minimum)

Health: 1                      Fire: 1                      Reactivity: 0

S.A.R.A. Title III Hazard Classification: (Yes/No)

Immediate (Acute) Health: Y                      Delayed (Chronic) Health: N  
Sudden Release of pressure: N                      Fire: Y  
Reactive: N

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Mail inquiries to: 225 Schilling Blvd., Suite 300 Collierville, TN 38017  
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