**Safety Information** TOP MSDS Date: 04/19/1988 **FSC:** 6850 MSDS Num: BJSMX Submitter: FBT LIIN: 00F013578 **Tech Review:** 01/02/1991 Status CD: C **Product ID:** ASSAULT **MFN:** 01 Article: N Kit Part: N Cage: FO664 Responsible Party Name: HILLYWARD CHEMICAL CO Address: 302 NORTH FOURTH STREET Box: N/K City: ST. JOSEPH State: MO **Zip:** 64502 Country: NK **Info Phone Number:** (816) 233–1321 Emergency Phone Number: (816) 233-1321 Preparer's Name: N/P Proprietary Ind: N Review Ind: Y Published: Y Special Project CD: N Co. when other than Responsible Party Co. **TOP** Cage: FO664 Assigned Ind: Y Name: HILLYWARD CHEMICAL CO Address: 302 NORTH FOURTH STREET Box: N/K City: ST. JOSEPH State: MO **Zip:** 64502 = Contractor Name: HILLYARD INDUSTRIES Cage: 28745 Address: 302 NORTH FOURTH STREET City:ST JOSEPH State: MO Zip:64501 Country: US Phone: 816-233-1321 (EXT 2303) Cage:FO664 Name: HILLYWARD CHEMICAL CO Address: 302 NORTH FOURTH STREET Box: N/K

City:ST. JOSEPH State: MO Zip:64502 Country:NK Phone: (816) 233–1321

Ingredients TOP

> Cas: 111-76-2 Code: M RTECS #: KJ8575000 Code: M

Name: 2-BUTOXYETHANOL

% Text: 20-25% **Environmental Wt:**  Other REC Limits: 25 PPM (SKIN)

OSHA PEL: S, 50 PPM Code: M OSHA Code: STEL:

ACGIH TLV: S, 25 PPM; 9293 Code: M ACGIH N/P Code: STEL:

EPA Rpt Qty: DOT Rpt Qty:

Ozone Depleting Chemical: N

Cas: 141–43–5 Code: M RTECS #: KJ5775000 Code: M

Name: ETHANOLAMINE

% Text: 10–15% Environmental Wt:

Other REC Limits: 3 PPM

Code:

OSHA PEL: 3 PPM/6 STEL Code: M OSHA Code: STEL:

ACGIH TLV: 3 PPM/6 STEL; 9192 Code: M ACGIH N/P STEL:

EPA Rpt Qty:

DOT Rpt
Qty:

Ozone Depleting Chemical: N

Health Hazards Data

LD50 LC50 MixtureN/K

Route Of Entry Inds – Inhalation: YES Skin: YES Ingestion: YES

Carcinogenicity Inds – NTP:NO IARC:NO OSHA:NO

Health Hazards Acute And Chronic

INHALATION: CORROSIVE TO ALL BODY TISSUES. HIGH CONCENTRATIONS OF VAPORS RESULTS IN RESPIRATORY IRRITATION, NARCOSIS, HEADACHE, NAUSEA, DIZZINESS, HEMATURIA & DAMAGE TO LIVER & KIDNEYS. SKIN: DERMATIT IS.

**Explanation Of Carcinogenicity** 

NONE

Signs And Symptions Of Overexposure

SKIN: BUTYL CELLOSOLVE IS READILY ABSORBED THROUGH THE SKIN IN TOXIC AMOUNTS.

Medical Cond Aggravated By Exposure

REPEATED EXPOSURE MAY DAMAGE THE BLOOD.

First Aid

INHALATION: REMOVE TO FRESH AIR. SKIN & EYES: FLUSH W/PLENTY OF WATER FOR AT LEAST 15 MINS. INGESTION: GIVE LARGE AMOUNTS OF WATER. OBTAIN MEDICAL ATTENTION IN ALL CASES.

Spill Release Procedures

ABSORB LARGE SPILLS W/FLOOR DRY MATERIAL. SMALL SPILLS: FLUSH W/WATER & PICK UP WITH MOP & WET VACUUM.

Neutralizing Agent

N/K

Waste Disposal Methods

DISPOSE OF IN ACCORDANCE WITH STATE OR LOCAL REGULATIONS. DON'T DISPOSE OF IN STORM DRAINS OR STREAMS; MONOETHANOLAMINE IS TOXIC TO—FISH.

## **Handling And Storage Precautions**

KEEP CONTAINER CLOSED WHEN NOT IN USE. SINCE EMPTY PACKAGES RETAIN PRODUCT RESIDUE, FOLLOW LABEL WARNING EVEN AFTER PACKAGE IS EMPTY.

## Other Precautions

DON'T STORE >120F. SPRAY MIST MAY PRODUCE RESPIRATORY IRRITATION OR DAMAGE & INCREASE SUSCEPTIBILITY TO RESPIRATORY ILLNESS.

Explosion H	azard Information TOP
Flash Point Method: TCC	
Flash Point:	Flash Point Text: NONE
Autoignition Temp:	Autoignition Temp Text: N/A
Lower Limits: N/R	Upper Limits: N/R
	Extinguishing Media
CO2, DRY CHEMICAL OR FOAM	
I	Fire Fighting Procedures
WEAR SELF-CONTAINED BREATHING APPARA	TUS & FULL PROTECTIVE CLOTHING.
Unu	sual Fire/Explosion Hazard
N/K	
Measures	TOP
Respi	ratory Protection
VENTILATION TO KEEP AIR <tlv, a="" approved="" be="" for="" if="" needed.<="" niosh="" organic="" respirator="" should="" td="" vapor="" worn=""></tlv,>	
,	Ventilation
AT LEAST 10 AIR CHGS/HR RECOMMENDED. MECHANICAL: RECOMMEND ED	
Pro	tective Gloves
IMPERVIOUS	
Ey	ye Protection
CHEMICAL SAFETY GOGGLES	
Other Pro	otective Equipment
IMPERVIOUS BOOTS & APRONS	

Work Hygienic Practices

WASH THOROUGHLY AFTER HANDLING. REMOVE &WASH ALL CONTAMINATED CLOTHING BEFORE REUSE.

Supplemental Safety and Health

**Physical/Chemical Properties** <u>TOP</u> HCC: NRC/State LIC No: Net Prop WT For Ammo: **Boiling Point:** B.P. Text: 209F Melt/Freeze Pt: M.P/F.P Text: N/K Decomp Temp: Decomp Text: N/K Vapor Pres: 0.6543 Vapor Density: N/R Volatile Org Content %: Spec Gravity: 0.986-0.992 **VOC Pounds/Gallon:** PH: N/K VOC Grams/Liter: Viscosity: N/P Evaporation Rate & Reference: SLOWER THAN ETHER Solubility in Water: COMPLETE Appearance and Odor: PALE YELLOW LIQUID; FLORAL ODOR Percent Volatiles by Volume: 99.8% Corrosion Rate: N/K **Stability Indicator: YES** Stability Condition To Avoid: DON'T STORE >120F Materials To Avoid: STRONG OXIDIZERS, PERMANGANATE, STRONG ACIDS Hazardous Decomposition Products: ORGANIC MATERIAL, CO, CO2 Hazardous Polymerization Indicator: NO Conditions To Avoid Polymerization N/K **Toxicological Information** <u>TOP</u> Toxicological Information: N/P Information <u>TOP</u> Ecological: N/P **Transport Information** <u>TOP</u> Transport Information: N/P = Regulatory <u>TOP</u> Information

\_\_\_\_\_

Sara Title III Information: N/P

Federal Regulatory Information: N/P

State Regulatory Information: N/P

Information TOP

Other Information: N/P

This information is formulated for use by elements of the Department of Defense. The United States of America in no manner whatsoever expressly or implied warrants, states, or intends said

information to have any application, use or viability by or to any person or persons outside the Department of Defense nor any person or persons contracting with any instrumentality of the United States of America and disclaims all liability for such use. Any person utilizing this instruction who is not a military or civilian employee of the United States of America should seek competent professional advice to verify and assume responsibility for the suitability of this information to their particular situation regardless of similarity to a corresponding Department of Defense or other government situation.