

TERMINAL PACKAGING CORP. -- POLAR ANTIFREEZE -- 6850-00-664-1403

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Product Identification
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Product ID:POLAR ANTIFREEZE

MSDS Date:12/19/1989

FSC:6850

NIIN:00-664-1403

MSDS Number: BHYJX

=== Responsible Party ===

Company Name:TERMINAL PACKAGING CORP.

Address:2850 RIVER ROAD

City:COUNCIL BLUFFS

State:IA

ZIP:51501

Country:US

Info Phone Num:712-323-9802 OR 800-424-9300

Emergency Phone Num:712

-323-9802 OR 800-424-9300

Preparer's Name:JERRY MCMILLEN

CAGE:0KDB2

=== Contractor Identification ===

Company Name:TERMINAL PACKAGING CORP

Address:2850 RIVER RD

Box:City:COUNCIL BLUFFS

State:IA

ZIP:51501

Country:US

Phone:712-323-9802

CAGE:0KDB2

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Composition/Information on Ingredients
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Ingred Name:ETHYLENE GLYCOL (SARA III)

CAS:107-21-1

RTECS #:KW2975000

Fraction by Wt: 0.95%

OSHA PEL:C 50 PPM

ACGIH TLV:C 50 PPM,VAPOR; 9192

EPA Rpt Qty:1 LB

DOT Rpt Qty:1 LB

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Hazards Identification
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Routes of Entry: Inhalation:UNKNOWN Skin:NO Ingestion:YES
Health Hazards Acute and Chronic:EYES: MAY CAUSE SLIGHT EYE IRRITATION.
SKIN: MAY BE SLIGHTLY IRRITATING UPON PROLONGED CONTACT.
RESPIRATORY SYSTEM: DROWSINESS, NARCOSIS & UNCONSCIOUSNESS
POSSIBLE UPON EXPOSURE TO HIGH CONCENTRATIONS IN POORLY
VENTILATED, CONFINED SPACES. LIVER & KIDNEY DAMAGE IN 2 YEAR RAT
FEEDING STUDY; 1-2% ETHYLENE GLYCOL.

Effects

of Overexposure:OVEREXPOSURE TO VAPORS OF ETHYLENE GLYCOL ARE
ASSOCIATED WITH INJURIES TO LIVER, KIDNEYS, LUNGS, BLOOD & CENTRAL
NERVOUS SYSTEM. SKIN ABSORPTION CAN INDUCE CENTRAL NERVOUS SYSTEM
DEPRESSION & KIDNEY INJURY. IN ADDITION TO THE EFFECTS OF ACUTE
INGESTION, REPEATED INGESTION CAN INDUCE BRAIN INJURY.

Medical Cond Aggravated by Exposure:NA

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First Aid Measures
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First Aid:EYES: IRRIGATE THE EYES IMMEDIATELY FOR 5 MINUTES,
CONSULT MEDICAL. SKIN: WASH OFF IN FLOWING WATER. DECONTAMINATE CLOTHING &
ACCESSORIES BEFORE RE-USE. INHALATION: REMOVE TO FRESH AIR IF
EFFECTS OCCUR, CONSULT MEDICAL. INGESTION: TOXIC BY INGESTION.
INDUCE VOMITING IMMEDIATELY. CALL A PHYSICIAN AND/OR TRANSPORT TO
EMERGENCY FACILITY.

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Fire Fighting Measures
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Flash Point Method:CC
Flash Point:240F/115C
Autoignition Temp:Autoignition Temp Text:250F
Lower Limits:3.2
Upper Limits:15.3
Extinguishing Media:WATER, ALCOHOL, FOAM, CO2 OR DRY CHEMICAL
Fire Fighting Procedures:SELF CONTAINED BREATHING APPARATUS WITH FULL
FACE PIECE & PROTECTIVE CLOTHING
Unusual Fire/Explosion Hazard:NA

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Accidental Release Measures
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Spill Release Procedures:WEAR SKIN, EYE & RESPIRATORY PROTECTION DURING
CLEAN-UP. CONTAIN SPILL & KEEP OUT OF SEWERS & DRAINS, SOAK
UP LIQUID WITH ABSORBENT & SHOVEL INTO WASTE CONTAINER.

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Handling and Storage
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Handling and Storage Precautions:MINIMUM FEASIBLE HANDLING TEMPERATURES SHOULD BE MAINTAINED. PERIODS OF EXPOSURE TO HIGH TEMPERATURES SHOULD BE MINIMIZED. ETHYLENE GLYCOL BASE.

Other Precautions:HARMFUL OR FATAL IF SWALLOWED. KEEP OUT OF REACH OF CHILDREN. MAY CAUSE IRRITATION TO EYES. DO NOT DRINK ANTIFREEZE OR SOLUTION. AVOID CONTACT WITH EYES. WASH THOROUGHLY AFTER HANDLING. DO NOT STORE IN OPEN OR UNLABELED CONTAINERS.

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Exposure Controls/Personal Protection
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Respiratory Protection:OSHA-NIOSH APPROVED RESPIRATOR FOR FUMES WITH TLV>.05 MG/M3.

Ventilation:LOCAL EXHAUST, RECOMMENDED

Protective Gloves:IMPERVIOUS GLOVES

Eye Protection:GOGGLES OR FACE SHIELD AND OR EYE WASH

Other Protective Equipment:APRON-COVER ARMS, DEPENDING UPON CONDITIONS OF USE.

Work Hygienic Practices:PREVENT SKIN AND EYE CONTACT. OBSERVE TLV LIMITATIONS.

Supplemental Safety and Health FOLLOW

PROCEDURES SPECIFIED IN THE NATIONAL FIRE PROTECTION ASSOCIATION CODES AND STANDARDS FOR HANDLING COMBUSTIBLE LIQUIDS. PREVENT SKIN AND EYE CONTACT. AVOID BREATHING VAPORS AND AEROSOLS. THOROUGH SHOWERING AT END OF WORK SHIFT IS STRONGLY RECOMMENDED. WORK CLOTHES SHOULD BE LAUNDERED DAILY.

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Physical/Chemical Properties
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Boiling Pt:B.P. Text:325 F/162 C

Melt/Freeze Pt:M.P/F.P Text:0 F/-20 C

Decomp Temp:Decomp Text:NA

Vapor Pres:0.06 @ 68F

Vapor Density:2.0

Spec Gravity:1.12 (H2O=1)

pH:10-11

Viscosity:100F/SUS