Product ID:70203 MORPHOLINE MSDS Date:12/06/1990 FSC:6810 NIIN:00-559-9889 MSDS Number: BRGJW === Responsible Party === Company Name: TEXACO CHEMICAL CO Address:4800 FOURANCE PLACE Box:27707 **City:HOUSTON** State:TX ZIP:77227 Country:US Info Phone Num:914-838-7204MSDS(7336)/512-459-6543 **Emergency Phone Num:91** 4-831-3400/409-727-8381/424-9300 Preparer's Name:NONE CAGE:19630 === Contractor Identification === Company Name: MAGNOLIA CHEMICALS AND SOLVENTS Address:1020 SAMS AVENUE Box:10276 **City:NEW ORLEANS** State:LA ZIP:70181-0278 Country:US Phone:504-733-6600 CAGE:0LNB7 Company Name:SDB CONSULTANTS LTD Address:401 WHITNEY AVE SUITE 120 Box:City:GRETNA State:LA ZIP:70056 Country:US Phone:504-366-9105 CAGE:0PGK2 Company Name: TEXACO CHEMICAL CO DIV OF TEXCAO INC Address:4800 FOURNACE PL Box:City:BELLAIRE Sta

te:TX ZIP:77401 Country:US Phone:713-961-3711 CAGE:19630 Company Name:TEXACO REFINING AND MARKETING INC Address:1111 RUSK ST Box:City:HOUSTON State:TX ZIP:77002-3310 Country:US Phone:713-650-5206 CAGE:2R503

Ingred Name:MORPHOLINE CAS:110-91-8 RTECS #:QD6475000 Fraction by Wt: 40% Other REC Limits:NONE RECOMMENDED OSHA PEL:S,20 PPM/30 STEL ACGIH TLV:S, 20 PPM; 9293

LD50 LC50 Mixture:LD50 (ORAL RAT) IS 1050 MG/KG Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO Health Hazards Acute and Chronic:ACUTE: EYES: SEVERE IRRITATION. SKIN: IRRITATION OR CHEMICAL BURNS UPON PROLONGED CONTACT. INHALATION: IRRITATION OF RESPIRATORY TRACT. INGESTION: MODERATELY TOXIC. Explanation of Carcinogenicity:NONE. Effects of Overexposure:EYES: SEVERE IRRITATION. SKIN: IRRITATION, CHEMICAL BURNS. INH ALATION: RESPIRATORY TRACT IRRITATION. INGESTION: MODERATELY TOXIC. Medical Cond Aggravated by Exposure:MAY AGGRAVATE EXISTING RESPIRATORY CONDITIONS, SUCH AS ASTHMA, BRONCHITIS AND INFLAMMATORY OR FIBROTIC RESPIRATORY DISEASE. MAY AGGRAVATE AN EXISTING DERMATITIS.

First Aid:EYES: FLUSH WITH LARGE AMOUNTS OF WATER. GET MEDICAL ATTENTION. SKIN: REMOVE CONTAMINATED CLOTHING. FLUSH AREA WITH LARGE AMOUNTS OF WATER. GET MEDICAL ATTENTION. INHALATION: MOVE TO FRESH AIR. IF NOT BREATHING GIVE CPR. IF BREATHING DIFFICULT GIVE OXYGEN. GET MEDICAL ATTENTION. INGESTION: GIVE 2 GLASSES OF WATER. DO NOT INDUCE VOMITING. GET MEDICAL ATTENTION.

Flash Point:190F,88C

Extinguishing Media:WATER FOG, FOAM, CARBON DIOXIDE. Fire Fighting Procedures:IF LEAK HAS NOT IGNITED, USE WATER SPRAY TO DISPERSE VAPORS AND TO PROTECT PERSONNE

L ATTEMPTING TO STOP LEAK.

WEAR SELF CONTAINED BREATHING APPARATUS.

Unusual Fire/Explosion Hazard:DANGER! VAPOR IS HEAVIER THAN AIR AND CAN TRAVEL TO A SOURCE OF IGNITION AND FLASH BACK. EXPLOSIVE AIR-VAPOR MIXTURES MAY FORM. CONTAINERS MAY EXPLODE IN FIRE.

Spill Release Procedures: ELIMINATE SOURCES OF IGNITION. VENTILATE AREA. KEEP PEOPLE AWAY. STAY UPWIND AND WARN OF EXPLOSION HAZARD. USE SCBA AND AVOID S

KIN/CLOTHING CONTACT. CONTAIN SPILL IF POSSIBLE.

REMOVE WITH INERT ABSORB ENT. PREVENT ENTRY TO SEWERS AND WATERWAYS.

Neutralizing Agent:NONE SPECIFIED BY MANUFACTURER.

Handling and Storage Precautions:STORE IN COOL, WELL VENTILATED AREA AWAY FROM HEAT, SPARKS, FLAME AND IGNITION SOURCES. USE SPARK-PROOF TOOLS.

Other Precautions: GROUND AND BOND SHIPPING CONTAINER, TRANSFER LINE, AND RECEIVING CONTAINER. MAT

ERIAL MAY BE AT ELEVATED TEMPERATURES

AND/OR PRESSURES. EXERCISE CARE WHEN OPENING BLEEDERS AND SAMPLING PORTS.

======= Exposure Controls/Personal Protection ==========

Respiratory Protection: IF VAPOR, DUST OR MIST IS GENERATED, USE RESPIRATOR APPROVED BY NIOSH AS APPROPRIATE. USE SCBA WHEN CLEANING LARGE SPILLS OR FOR ENTRY TO TANKS, VESSELS OR OTHER CONFINED SPACES.

Ventilation: PROVIDE ADEQUUATE VENTILATION TO MAINTAIN TLV/PEL BELOW RECOMMENDED LIMITS.

Prot

ective Gloves: IMPERVIOUS GLOVES. Eve Protection: CHEMICAL GOGGLES AND FACE SHIELD. Other Protective Equipment: EYE WASH STATION AND SAFETY SHOWER. WEAR UNIFORMS, COVERALLS, LAB COATS. WEAR IMPERVIOUS SUITS FOR HANDLING LARGE AMOUNTS. Work Hygienic Practices: WASH AFTER HANDLING AND BEFORE EATING, DRINKING, OR SMOKING. LAUNDER CONTAMINATED CLOTHING BEFORE REUSE. Supplemental Safety and Health DO NOT WEAR CONTACT LENSES. "EMPTY" CONTAINERS MAY CONTAIN RESIDUE OR VAPOR. TREAT THEM WITH T HE RESPECT DUE FULL ONES. DO NOT CUT, WELD, GRIND, DRILL, ETC. ON THEM. HCC:B2 Boiling Pt:B.P. Text:263F,128C Vapor Density:3.0 Spec Gravity:1.0017 pH:11.2 Solubility in Water: APPRECIABLE Appearance and Odor: CLEAR, COLORLESS LIQUID. AMMONIA ODOR. Percent Volatiles by Volume:100 Stability Indicator/Materials to Avoid:YES STRONG OXIDIZING AGENTS, ACIDS, N ITRATES. Stability Condition to Avoid: HIGH HEAT, SPARKS, OPEN FLAMES AND OTHER SOURCES OF IGNITION. Hazardous Decomposition Products: TOXIC LEVELS OF AMMONIA, COMBUSTION

PRODUCTS OF NITROGEN, CARBON MONOXIDE, CARBON DIOXIDE, ALDEHYDES AND KETONES

Conditions to Avoid Polymerization:WILL NOT OCCUR.

Waste Disposal Methods:DISPOSE IN ACCORDANCE WITH LOCAL,STATE AND FEDERAL REGULATIONS. PRODUCT HAS RCRA CHARACTERISTI

CS OF

IGNITIBILITY WITH RCRA WASTE NUMBER D001. USER HAS RESPONSIBILITY TO DETERMINE AT TIME OF DISPOSAL I F PRODUCT MEETS RCRA CRITERIA FOR HAZARDOUS WASTE.

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