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MSDS NO.: 6
                                        MATERIAL SAFETY DATA SHEET
  PART NO.: 4100 SERIES
                                                FORM #6-JMD
 PRODUCT NAME: SPILFYTER FOR HAZARDOUS MATERIALS
                                                  56616-024 56616-076
              -KOLORSAFE LIQUID ACID NEUTRALIZER
                                                56609-202
 CHEMICAL NAME: LIQUID ACID NEUTRALIZER
 SECTION I - GENERAL INFORMATION
 MANUFACTURER: JV MANUFACTURING CO, INC.
 ADDRESS: 963 ASHWAUBENON STREET
         GREEN BAY, WI 54304
 EMERGENCY TELEPHONE NO.: (800)424-9300
 INFORMATION TELEPHONE NO.: (800)334-9092
 DATE PREPARED: 7/01/93 REPLACES ALL PREVIOUS MSDS VERSIONS.
                                                HMIS RATINGS: NFPA:
                                                  HEALTH: 2 HEALTH: 2
                                                  FIRE:1
                                                               FIRE:1
                                                  REACTIVITY:1 REACT::1
                                          PERSONAL PROTECTION: X SPEC. HAZ.
 SECTION 2 - HAZARDOUS INGREDIENTS
 SUB- SARA OSHA ACGIH OTHER LIMITS
         HAZARDOUS COMPONENT NTP IARC PART/Z 313 PEL TLV RECOMMENDED %
 CAS #

      102-71-6
      TRIETHANOLAMINE
      N
      N
      N
      N

      111-42-2
      DIETHANOLAMINE
      N
      N
      Y
      Y

      72-48-0
      ALIZARIN
      N
      N
      N
      N

                                                NE 5MG/M3 1% WHMIS <50.0
                                                3PPM 3PPM 1% WHMIS <3.0
                                                      NE NE
NE NE
                                                NE
                                                                     <1.0
 7732-18-2 WATER
                             N N N N
                                                NE
                                                                     >46.0
 SECTION III - PHYSICAL/ CHEMICAL CHARACTERISTICS
                        SPECIFIC GRAVITY(H20=1): 1.09405
 BOILING POINT: 103.2
 VAPOR PRESSURE (MM HG): NT
                                   MELTING POINT: NT
 VAPOR DENSITY(AIR=1): NT
                                   EVAPORATION RATE (BUTYL ACETATE=1): NT
 SOLUBILTITY IN WATER: COMPLETE
 APPEARANCE AND ODOR: PURPLE LIQUID, AMMOINIA ODOR
 OTHER INFORMATION: PH...11.5 VISCOSITY...LOW PERCENT VOLATILES...50
 FREEZING POINT...70 F
  SECTION IV - FIRE AND EXPLOSION HAZARD DATA
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 FLASH POINT AND METHOD: NT FLAMMABLE LIMITS: LEL: NA UEL: NA
 EXTINGUISHING MEDIA: NON-FLAMMABLE AS SUPPPLIED. WATER SPRAY, DRY CHEMICAL, FOAM
 ,CO2, IF THE NEED EXISTS. WATER OR FOAM MAY CAUSE FROTHING. USE WATER TO COOL
 FIRE-EXPOSED CONTAINER. IF A LEAK OR SPILL HAS NOT IGNITED, USE WATER SPRAY TO
DISPERSE THE VAPORS & TO PROVIDE PROTECTION TO PERSONS ATTEMPTING TO STOP LEAK.
SPECIAL FIRE FIGHTING PROCEDURES: FOR LARGE FIRE OR IN CONTAINED AREA, USE NIOSH
 MSHA APPROVED SCBA WHEN EXPOSED TO SMOKE & DURING CLEANUP & SALVAGE OPERATIONS
STABILITY: STABLE INCOMPATIBILTY: NITRITES DO NOT ADD OR FORMULATE W/ NITRITES
THIS PRODUCTS CONTAINS AMINES WHICHCAN COMBINE W/NITRITES TO FORM NITROSAMINES.
MANY NITROSAMINES HAVE BEEN SHOWN TO CAUSE CANCER IN LAB ANIMALS. HAZ. DECOMP.
OF PRODUCTS: THERAML DECOMP. NITROGEN, CO, CO2, AMMONIA, IRRITATING ALDEHYDES &
KETONES AMY BE FORMED ON BURNING IN A LIMITED AIR SUPPLY.
HAZARDOUS POLYMERIZATION: MAY OCUUR..NO WILL NOT OCCUR..YES
ROUTES OF ENTRY: EYES...YES SKIN..YES INAHALATION..YES INGESTION..YES
HEALTH HAZARDS (ACUTE AND CHRONIC):
EFFECTS OF OVEREXPOSURE: ACUTE(IMMEDIATE): EYES-MAY CAUSE IRRITATION, EXPERIENC
ED AS MILD DISCOMFORT & SEEN AS SLIGHT REDNESS OF THE EYE. SKIN-NO ADVERSE
EFFECTS EXPECTED FROM ABSORBTION OF MATERIALS THROUGH SKIN. BRIEF CONTACY MAY
CAUSE SLIGHT IRRITATION. PROLONGED CONTACT AS W/CLOTHING WET W/ MATERIAL MAY
CAUSE MORE SEVERE IRRITATION & DISCOMFORT SEEN AS LOCAL REDNESS & SWELLING.
INHALATION: VAPORS OR MISTS IN EXCESS OF PERMISSIBLE CONCENTRATIONS, OR IN UN-
USUALLY HIGH CONCENTRATIONS GENERATED FROM SPRAYING, HEATING OR FROM EXPOSURE
IN POORLY VENTILATED OR CONFINED SPACES, MAY CAUSE IRRITATION OF NOSE & THROAT,
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HEADACHE, NAUSEA, & DROWSINESS. INGESTION: NO ADVERSE EFFECTS EXPECTED. IF MORE THAN SEVERAL MOUTHFULS ARE SWALLOWED, ABDOMINAL DISCOMFORT, NAUSEA, AND

DIARRHEA MAY OCCUR.

EXPOSURE LIMITS:

CHRONIC (DELAYED): NO ADVERSE EFFECTS ANTICIPATED.

SIGNS & SYMPTOMS OF EXPOSURE: SEE HEALTH HAZARDS ABOVE FOR SYMPTOMS.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: BECAUSE OF ITS IRRITATING PROPERTIES, REPEATED SKIN CONTACT MAY AGGRAVATE EXIXSTING DERMATITIS. REPEATED OVEREXPOSURE MAY AGGRAVATE EXISTING KIDNEY DISEASE.

## EMERGENCY AND FIRST AID PROCEDURES:

EYES: IMMEDIATELY FLUSH EYES WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES.HOLD EYELIDS APART WHILEFLUSHING TI RINSE ENTIRE SURFACE OF EYE & LIDS W/WATER. SEEK MEDICAL ATTENTION.

SKIN: REMOVE CONTAMINTED CLOTHING. WASH W/ PLENTY OF SOAP & WATER FOR SEVERAL MINUTES. SEEK MEDICAL ATTENTION IF IRRITATION DVELOPS OR PERSISTS.

INHALATION: REMOVE TO FRESH AIR. IF NOT BREATHING, GIVE ARTIFICIAL RESPIRATION.

IF BREATHING IS DIFFICULT, GIVE OXYGEN. SEEK MEDICAL ATTENTION.

INGESTION: IF SWALLOWED, GIVE 2 GLASSES OF WATER (160Z.). CALL PHYSICIAN OR POISON CONTROL CTR IMMEDIATELY. NEVER GIVE ANYTHING BY MOUTH TO UNCONSCIOUS PERSON OTHER HEALTH WARNINGS: REMOVE & DRYCLEAN OR LAUNDER CLOTHING SOAKED OR SOILED W/ THIS MATERIAL SEPAERATELY BEFORE REUSE. INFORM INDIVIDUALS RESPONSIBLE FOR CLEANING CLOTHING THE POSSIBLE HAZARDS ASSOCIATED W/CONTAMINATED CLOTHING.

TRIETHANOLAMINE (ETHANOL, 2, 2', 2''-NITRILOTRIS)

DIETHANOLAMNINE (ETHANOL, 2, 2'-IMINOBIS)

TWA 5MG/M3 (ACGIH)

TWA 3PPM (OSHA) TWA 3PPM (ACGIH)

SECTION VII -PRECAUTIONS FOR SAFE HANDLING & USE STEPS TO BE TAKEN IN CASE MATERIAL OS RELEASED OR SPILLED: VENTILATE AREA.AVOID BREATHING VAPOR.USE SELF-CONTAINED BREATHING APPARATUS OR SUPPLIED AIR FOR

BREATHING VAPOR.USE SELF-CONTAINED BREATHING APPARATUS OR SUPPLIED AIR FOR LARGE SPILLS OR IN CONFINED AREAS. CONTAIN LEAKING OR SPILLED MATERIAL W/ CHEMICALLY RESISTANT SORBENT MATERIALS. NEUTRALIZE SPILL W/ A WEAK ACID SUCH AS VINEGAR OR ACETIC ACID. ABSORB NEUTRALIZED LIQUID W/CHEMICALLY RESISTENT SORBENT MATERIALS. PLACE SORBED MATERIALS IN APPROVED DISPOSAL CONTAINER.SCRUB THE AREA W/DETERGENT & WATER. ALL SPILLS SHOULD BE HANDLED ACCORDING TO A PREDETER MINED PLAN IN ACCORDANCE W/29CFR1910.120 -HAZARDOUS WASTE & EMERGENCY RESPONSE.

WASTE DISPOSAL METHOD: DISPOSE OF ORIGINAL(VIRGIN) PRODUCT IN ACCORDANCE W/ FED ERAL, STATE, & LOCAL REGUALTIONS. ONCE THIS PRODUCT REACTS W/ A CHEMICAL IT WILL COONTAIN THE BY-PRODUCTS OF THE REACTION, WHICH SHOULD BE DISPOSED OF ACCORDING TO ALL FEDERAL, STATE, & LOCAL REGUALTIONS FOR THESE BY-PRODUCTS. PRECAUTIONS TO BE TAKEN IN HANDLING & SOTRAGE:

STORAGE: AVOID HIGH HEAT AND/OR FREEZING CONDTIONS. KEEP CONTAINER TIGHTLY CLOSED. SUITABLE FOR GENERAL CHEMICAL STORAGE AREA.

WARNING: THIS PRODUCT MUST BE PROPERLY STORED. IMPROPER STORAGE IS MISUSE. IF THE PRODUCT IS STORED AT TEMPS IN EXCESS OF 100 F, BELOW 70 F, OR AT ELEVATION OVER 5000 FEET, GAS MAY FORM. GAS WIL BULGE THE PACKAGE. IF BULGING OCCURS, TAKE THE PACKAGE OUTDOORS. WEAR PROTECTIVE EQUIPMENT, INCLUDING FACE SHIELD, SLOWLY OPEN THE CONTAINER TO VENT GAS.

WORK/HYGIENIC PRACTICES:

WORKERS SHOUL WASH EXPOSED SKIN SEVERAL TIMES DAILY WITH SOAP & WATER. OTHER PRECAUTIONS: NONE KNOWN.

SECTION VIII - CONTROL MEASURES

VENTILATION REQUIREMENTS:

LOCAL EXHAUST.....AS APPROPRIATE
MECHANICAL(GENERAL)...AS APPROPRIATE
SPECIAL....NONE
OTHER....NONE

DEDICONAL DECERCITATE CONTINUE

PERSONAL PROTECTIVE EQUIPMENT:

EYE AND FACE PROTECTION

WEAR AN ANSI 287.1-1989 APPROVED CHEMICAL GOGGLES AND/OR FACE SHIELD SHOULD BE WORN WHEN USING THIS PRODUCT.

PROTECTIVE GLOVES & CLOTHING: SUITABLE CHEMICALLY RESISTENT GLOVES & PROTECTIVE CLOTHING SHOULD BE WORN WHILE WORKING WITH THIS PRODUCT IN ACCORDANCE WITH 29 CFR 1910-132 - PERSONAL PROTECTIVE EQUIPMENT.

RESPIRATORY PROTECTION: IF A VAPOR OR MIST IS GENERATED USE NIOSH/MSHA APPROVED AIR PURIFYING RESPIRATOR W/ APPROPRIATE CHEMICAL CARTRIDGE OR CANISTER. SELF CONTAINED BREATHING APPARATUS (SCBA) SHOULD BE USED FOR LARGE-SCALE OPERATIONS. ANY RESPIRATOR WORN IN CONJUNCTION W/ THIS PRODUCT SHOULD BE WORN IN CONJUNCTION W/ 29 CFR 1910.134-RESPIRATORY PROTECTION. SEE SECTION VI FOR COMPONENT PERMISSIBLE EXPOSURE LIMITS.

OTHER PROTECTIVE EQUIPMENT: MAINTAIN SAFETY & FACE FOUNTAIN IN THE WORK AREA. HAVE OXYGEN READILY AVAILABLE.

SECTION IX - ADDITIONAL INFORMATION

ADDITIONAL MANUFACTURER WARNINGS:

REGULATORY INFORMATION

TSCA INVENTORY STATUS TRIETHANOLAMINE-LISTED

DIETHANOLAMINE -LISTED

ALIZARIN -LISTED

SARA TITLE III

SECTION 302 EXTREMELY HAZARDOUS SUBSTANCE LIST: NOT LISTED

SECTION 313 TOXIC CHEMICAL: DIETHANOLAMINE 111-42-2 <3.0 PERCENT

SECTION 311 HAZARD CATEGORIZATION: IMMEDIATE(ACUTE)...YES DELAYED...NO FIRE...NO REACTIVE...NO SUDDEN RELEASE OF PRESSURE..NO

US EPA CERCLA SEC. 102(A) HAZARDOUS SUBSTANCES: DIETHANOLAMINE 111-42-2 <2.0% RO(LBS) 1.0

RCRA HAZARDOUS WASTE: NOT LISTED

STATE/INT'L RIGHT-TO-KNOW REGULATION: CANADA'S WHMIS -TRIETHANOLAMINE 1%

-DIETHANOLAMNINE 1%

CLASS D, DIVISION 2, SUBDIVISION B: SKIN & EYE IRRITANT TRANSPORTATION INFORMATION

PROPER SHIPPING NAME: CORROSIVE LIQUIDS, N.O.S.

TECHNICAL NAME: (CONTAINS TRIETHANOLAMINE) IDENTIFICATION #:UN1760

PACKAGING GROUP: III

LABEL REQUIRED: CORROSIVE

DOT EMERGENCY RESPONSE GUIDEBOOK: GUIDE 60

IMDG: ND IATA: SAME AS DOT

TDG: PROPER SHIPPING NAME: CORROSIVE LIQUIDS, N.O.S. HAZARD CLASS: 8, (9.2) TECHNICAL NAME: (CONTAINS TRIETHANOLAMINE) SPECIAL PROVISION:109

IDENTIFICATION NUMBER: UN1760

PACKAGING GROUP: III

LABEL REQUIRED: CORROSIVE

## OTHER PRECAUTIONS AND COMMENTS:

ABBREVIATIONS:NA..NOT APPLICABLE ND..NOT DETERMINED NE..NOT ESTABLISHED DOT - US DEPT OF TRANSPORTATION LATA- INTL AIR TRANSPORT ASSN IMDG-INTL MARITIME ORG DANGEROUS GOODS CODE TDG- TRANSPORTATION OF DANGEROUS WHMIS: WORKERS HAZ MATER.INFO SYSTEMS(CANADA) GOODS (CANADA) NOTE!!! THIS MATERIAL SAFETY DATA SHEET (MSDS) HAS BEEN PREPARED ONLY FOR THE 4100 SERIES SPILFYTER KOLORSAFE LIQUID ACID NEUTRALIZER ITSELF.

BE VERY CAREFUL TO REVIEW THE MSDS SHEET FOR THE CHEMICAL THIS LIQUID NEUTRAL-IZER IS BEING USED WITH, AND TAKE PRECAUTINS AS DESCRIBED.

THE INFORMATIN ACCUMULATED HEREIN HAS BEEN COMPILED FROM SOURCES BELIEVED TO BE RELIABLE AND IS ACCURATE TO THE BEST OF OUR ABILITY. HOWEVER, JV MANUFACTURING CO INC. CANNOT GIVE GUARANTEES REGARDING THE INFORMATION FROM SOURCES, AND EXPRESSLY DOES NOT MAKE ANY WARRANTIES, NOR ASSUMES ANY LIABILTY FOR ITS USES OF THIS PRODUCT.

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THOSE PRODUCTS ARE ONLY TO BE USED BY PEOPLE HAVING EXPERIENCE IN USING HAZARDOUS MATERIALS.

THE INFORMATION PROVIDED ABOUT HAZARDOUS MATERIALS IS BELIEVED TO BE CORRECT.

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IF YOU RESELL SPILFYTER PRODUCTS, YOU MUST BY LAW, FURNISH YOUR CUSTOMERS A COPY OF MATERIAL SAFETY DATA SHEETS, AND HANDLING INSTUCTIONS.

YOU ARE ALSO REQUIRED BY LAW TO INSURE THAT ALL SPILFYTER PRODUCTS ARE PROPERLY SHIPPED.

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\*\*\*END MSDS\*\*\*