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## MATERIAL SAFETY DATA SHEET SECTION 1. - - - - - - CHEMICAL IDENTIFICATION- - - - - -CATALOG #: M6035 NAME: 4-(N-MALEIMIDOMETHYL) CYCLOHEXANE-1-CARBOXYLIC ACID 3-SULFO-N-HYDROXYSUCCINIMIDE ESTER SODIUM SECTION 2. - - - - COMPOSITION/INFORMATION ON INGREDIENTS - - - - -CAS #: 92921-24-9 MF: C16H17N2NAO9S ADDITIONAL INFORMATION CONTAINS N, N-DIMETHYLFORMAMIDE (DMF), CHEMICAL ABSTRACTS REGISTRY NUMBER 68-12-2. SECTION 3. - - - - - - - HAZARDS IDENTIFICATION - - - - - - -LABEL PRECAUTIONARY STATEMENTS TOXIC MAY CAUSE CANCER. HARMFUL BY INHALATION, IN CONTACT WITH SKIN AND IF SWALLOWED. IRRITATING TO EYES, RESPIRATORY SYSTEM AND SKIN. TARGET ORGAN(S): KIDNEYS LIVER IN CASE OF ACCIDENT OR IF YOU FEEL UNWELL, SEEK MEDICAL ADVICE IMMEDIATELY (SHOW THE LABEL WHERE POSSIBLE). IN CASE OF CONTACT WITH EYES, RINSE IMMEDIATELY WITH PLENTY OF WATER AND SEEK MEDICAL ADVICE. WEAR SUITABLE PROTECTIVE CLOTHING, GLOVES AND EYE/FACE PROTECTION. DO NOT BREATHE DUST. SECTION 4. - - - - - - - FIRST-AID MEASURES- - - - - - - -IN CASE OF CONTACT, IMMEDIATELY FLUSH EYES OR SKIN WITH COPIOUS AMOUNTS OF WATER FOR AT LEAST 15 MINUTES WHILE REMOVING CONTAMINATED CLOTHING AND SHOES. ASSURE ADEQUATE FLUSHING OF THE EYES BY SEPARATING THE EYELIDS WITH FINGERS. IF INHALED, REMOVE TO FRESH AIR. IF NOT BREATHING GIVE ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN. IF SWALLOWED, WASH OUT MOUTH WITH WATER PROVIDED PERSON IS CONSCIOUS. CALL A PHYSICIAN. WASH CONTAMINATED CLOTHING BEFORE REUSE. DISCARD CONTAMINATED SHOES. SECTION 5. - - - - - - - FIRE FIGHTING MEASURES - - - - - - - -EXTINGUISHING MEDIA WATER SPRAY. CARBON DIOXIDE, DRY CHEMICAL POWDER OR APPROPRIATE FOAM. SPECIAL FIREFIGHTING PROCEDURES WEAR SELF-CONTAINED BREATHING APPARATUS AND PROTECTIVE CLOTHING TO PREVENT CONTACT WITH SKIN AND EYES. UNUSUAL FIRE AND EXPLOSIONS HAZARDS

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EMITS TOXIC FUMES UNDER FIRE CONDITIONS.
SECTION 6. - - - - - - ACCIDENTAL RELEASE MEASURES- - - - - - -
   WEAR RESPIRATOR, CHEMICAL SAFETY GOGGLES, RUBBER BOOTS AND HEAVY
   RUBBER GLOVES.
   SWEEP UP, PLACE IN A BAG AND HOLD FOR WASTE DISPOSAL.
   AVOID RAISING DUST.
   VENTILATE AREA AND WASH SPILL SITE AFTER MATERIAL PICKUP IS COMPLETE.
SECTION 7. - - - - - - - HANDLING AND STORAGE- - - - - - - - -
   REFER TO SECTION 8.
SECTION 8. - - - - EXPOSURE CONTROLS/PERSONAL PROTECTION - - - - -
   WEAR APPROPRIATE NIOSH/MSHA-APPROVED RESPIRATOR, CHEMICAL-RESISTANT
   GLOVES, SAFETY GOGGLES, OTHER PROTECTIVE CLOTHING.
   SAFETY SHOWER AND EYE BATH.
   MECHANICAL EXHAUST REQUIRED.
   WASH THOROUGHLY AFTER HANDLING.
SECTION 9. - - - - - PHYSICAL AND CHEMICAL PROPERTIES - - - - -
 APPEARANCE AND ODOR
   SOLID.
SECTION 10. - - - - - - - - - STABILITY AND REACTIVITY - - - - - - -
 STABILITY
   STABLE.
 INCOMPATIBILITIES
   STRONG OXIDIZING AGENTS
 HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS
   THERMAL DECOMPOSITION MAY PRODUCE CARBON MONOXIDE, CARBON DIOXIDE,
   AND NITROGEN OXIDES.
   SULFUR OXIDES
 HAZARDOUS POLYMERIZATION
   WILL NOT OCCUR.
SECTION 11. - - - - - TOXICOLOGICAL INFORMATION - - - - -
 ACUTE EFFECTS
   HARMFUL IF SWALLOWED, INHALED, OR ABSORBED THROUGH SKIN.
   CAUSES EYE AND SKIN IRRITATION.
   MATERIAL IS IRRITATING TO MUCOUS MEMBRANES AND UPPER
   RESPIRATORY TRACT.
   EXPOSURE MAY CAUSE:
   STOMACH PAINS, VOMITING, DIARRHEA.
   NAUSEA, DIZZINESS AND HEADACHE
   THE TOXICOLOGICAL PROPERTIES HAVE NOT BEEN THOROUGHLY
   INVESTIGATED.
 CHRONIC EFFECTS
   CARCINOGEN.
   DAMAGE TO THE KIDNEYS
   TARGET ORGAN(S):
   KIDNEYS
   LIVER
SECTION 12. - - - - - - ECOLOGICAL INFORMATION - - - - - - -
   DATA NOT YET AVAILABLE.
SECTION 13. - - - - - - DISPOSAL CONSIDERATIONS - - - - - - -
   DISSOLVE OR MIX THE MATERIAL WITH A COMBUSTIBLE SOLVENT AND BURN IN A
   CHEMICAL INCINERATOR EQUIPPED WITH AN AFTERBURNER AND SCRUBBER.
   OBSERVE ALL FEDERAL, STATE AND LOCAL ENVIRONMENTAL REGULATIONS.
SECTION 14. - - - - - - - TRANSPORT INFORMATION - - - - - - -
   CONTACT SIGMA CHEMICAL COMPANY FOR TRANSPORTATION INFORMATION.
SECTION 15. - - - - - - REGULATORY INFORMATION - - - - - -
 EUROPEAN INFORMATION
   CAUTION: SUBSTANCE NOT YET FULLY TESTED.
   TOXIC
   R 45
   MAY CAUSE CANCER.
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R 20/21/22
   HARMFUL BY INHALATION, IN CONTACT WITH SKIN AND IF SWALLOWED.
   IRRITATING TO EYES, RESPIRATORY SYSTEM AND SKIN.
   IN CASE OF ACCIDENT OR IF YOU FEEL UNWELL, SEEK MEDICAL ADVICE
   IMMEDIATELY (SHOW THE LABEL WHERE POSSIBLE).
   IN CASE OF CONTACT WITH EYES, RINSE IMMEDIATELY WITH PLENTY OF
   WATER AND SEEK MEDICAL ADVICE.
   S 36/37/39
   WEAR SUITABLE PROTECTIVE CLOTHING, GLOVES AND EYE/FACE
   PROTECTION.
   S 22
   DO NOT BREATHE DUST.
 TLV AND SOURCE
   FOR DIMETHYLFORMAMIDE (DMF):
   ACGIH TLV-TWA: 10 PPM(30 MG/M3) - SKIN.
   OSHA PEL: 8H TWA 10 PPM(30 MG/M3) - SKIN.
 U.S. INFORMATION
   MAY CONTAIN UP TO:
    3.2% N, N-DIMETHYLFORMAMIDE 68-12-2
   THIS PRODUCT IS SUBJECT TO SARA SECTION 313 REPORTING REQUIREMENTS.
SECTION 16. - - - - - - - - OTHER INFORMATION- - - - - - - - - -
   THE ABOVE INFORMATION IS BELIEVED TO BE CORRECT BUT DOES NOT PURPORT TO
   BE ALL INCLUSIVE AND SHALL BE USED ONLY AS A GUIDE. SIGMA, ALDRICH,
   FLUKA SHALL NOT BE HELD LIABLE FOR ANY DAMAGE RESULTING FROM HANDLING
   OR FROM CONTACT WITH THE ABOVE PRODUCT. SEE REVERSE SIDE OF INVOICE OR
   PACKING SLIP FOR ADDITIONAL TERMS AND CONDITIONS OF SALE.
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