

nyl ester, branched and linear
085507795 R 20.0000/ 30.0000% W 1,2-Benzenedicarboxylic acid, diundecyl ester, branched and linear
111381896 R 20.0000/ 30.0000% W 1,2-Benzenedicarboxylic acid, heptyl nonyl ester, branched and linear
111381909 R 20.0000/ 30.0000% W 1,2-Benzenedicarboxylic acid, heptyl undecyl ester, branched and linear
1FID: 00262181 C H E M I S T R I DATE: 10/22/02
VER DATE: 1994-09-22 MATERIAL SAFETY DATA SHEET TIME: 19:02:08
PAGE: 0002
111381910 R 20.0000/ 30.0000% W 1,2-Benzenedicarboxylic acid, nonyl undecyl ester, branched and linear
989947414 R 30.0000/ 40.0000% W DIPHENYLMETHANE DIISOCYANATE (MDI) BASED URETHANE PREPOLYMER
989984068 R 30.0000/ 40.0000% W METHYLENE BISPHENYL DIISOCYANATE BASED URETHANE POLYMER (BLEND OF PMN NO.S P 83-1015 AND P 83-1017)

SECTION 2 - OTHER INFORMATION: 989947414 IS REGISTERED ON EPA TSCA WITH C-FORM NO. C31483571. 989947414 AND 989984068 ARE MIXED AND TOGETHER MAKE UP 30-40% OF THE PRODUCT. ALTHOUGH SOME OF THE FILLERS USED IN THIS PRODUCT MAY HAVE EXPOSURE GUIDELINES, NO EXPOSURE WOULD BE EXPECTED UNDER NORMAL HANDLING CONDITIONS BECAUSE OF THE PHYSICAL STATE OF THE MATERIAL.

THRESHOLD LIMIT VALUE: 989984068; 989947414: 0.005 PPM TWA

PERMISSIBLE EXPOSURE LIMIT: 989984068; 989947414: 0.02 PPM CEILING.

CERCLA (SUPERFUND) REPORTABLE QUANTITY (LBS): TO THE BEST OF OUR KNOWLEDGE, THIS PRODUCT CONTAINS NO CHEMICAL SUBJECT TO REPORTING UNDER CERCLA.

SECTION 03: HAZARDS IDENTIFICATION

EFFECTS OF OVEREXPOSURE - SKIN: PROLONGED OR REPEATED EXPOSURE MAY CAUSE SLIGHT SKIN IRRITATION. MATERIAL MAY STICK TO SKIN CAUSING IRRITATION UPON REMOVAL. A SINGLE EXPOSURE IS NOT LIKELY TO RESULT IN THE MATERIAL BEING ABSORBED THROUGH SKIN IN HARMFUL AMOUNTS. MAY STAIN SKIN.

EFFECTS OF OVEREXPOSURE - EYE: MAY CAUSE EYE IRRITATION. MAY CAUSE IRRITATION OR CORNEAL INJURY DUE TO MECHANICAL ACTION.

EFFECTS OF OVEREXPOSURE - INHALATION: AT ROOM TEMPERATURE, EXPOSURES TO VAPORS ARE MINIMAL DUE TO PHYSICAL PROPERTIES; HIGHER TEMPERATURES MAY GENERATE VAPOR LEVELS SUFFICIENT TO CAUSE IRRITATION AND OTHER EFFECTS. SIGNS AND SYMPTOMS OF EXCESSIVE EXPOSURE MAY BE NAUSEA AND/OR VOMITING. THIS MATERIAL CONTAINS MINERAL AND/OR INORGANIC FILLERS THERE IS ESSENTIALLY NO POTENTIAL FOR INHALATION EXPOSURE TO THESE FILLERS INCIDENTAL TO INDUSTRIAL HANDLING DUE TO THE PHYSICAL STATE.

EFFECTS OF OVEREXPOSURE - INGESTION: SINGLE DOSE ORAL TOXICITY IS CONSIDERED TO BE LOW. SMALL AMOUNTS SWALLOWED INCIDENTAL TO NORMAL HANDLING OPERATIONS ARE NOT LIKELY TO CAUSE INJURY; SWALLOWING AMOUNTS

LARGER THAN THAT MAY CAUSE INJURY.
MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: NONE KNOWN

SECTION 3 - OTHER INFORMATION: THIS SECTION INCLUDES POSSIBLE ADVERSE EFFECTS WHICH COULD OCCUR IF THIS MATERIAL IS NOT HANDLED IN THE RECOMMENDED MANNER.

SECTION 04: FIRST AID MEASURES

EMERGENCY FIRST AID PROCEDURES - SKIN: WASH OF IN FLOWING WATER OR SHOWER.
EMERGENCY FIRST AID PROCEDURES - EYES: FLUSH WITH PLENTY OF WATER.
EMERGENCY FIRST AID PROCEDURES - INHALATION: REMOVE TO FRESH AIR IF EFFECTS OCCUR. CONSULT A PHYSICIAN.
EMERGENCY FIRST AID PROCEDURES - INGESTION: IF SWALLOWED, SEEK MEDICAL ATTENTION. DO NOT INDUCE VOMITING UNLESS DIRECTED TO DO SO BY MEDICAL PERSONNEL.

NOTES TO PHYSICIAN: NO SPECIFIC ANTIDOTE. SUPPORTIVE CARE. TREATMENT BASED ON JUDGMENT OF THE PHYSICIAN IN RESPONSE TO REACTION OF THE PATIENT.

SECTION 05: FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA: CARBON DIOXIDE, DRY CHEMICAL, FOAM

SPECIAL FIRE FIGHTING PROCEDURES: FIRE FIGHTERS SHOULD WEAR SELF-CONTAINED, POSITIVE PRESSURE BREATHING APPARATUS.

UNUSUAL FIRE AND EXPLOSION HAZARDS: NONE KNOWN.

NFPA CODES:

NFPA FLAMMABILITY CODE =	1
NFPA HEALTH CODE =	3
NFPA REACTIVITY CODE =	1

FLASH POINT TEMPS: > 220.00F
FLASH POINT METHOD: SETA

SECTION 5 - OTHER INFORMATION: UEL/LEL: NONE KNOWN // NFPA RATING: NOT RATED

SECTION 06: ACCIDENTAL RELEASE MEASURES

SPILL OR LEAK PROCEDURES: COVER AND CONTAIN SPILL WITH ABSORBENT MATERIAL. SCOOP MATERIAL INTO CONTAINER FOR DISPOSAL.

SECTION 07: HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: STORE IN TIGHTLY CLOSED CONTAINER. STORE INDOORS BETWEEN 50 AND 95 F.

SECTION 08: EXPOSURE CONTROLS - PROTECTION

EYE PROTECTION: USE SAFETY GLASSES. IF THERE IS A POTENTIAL FOR EXPOSURE TO PARTICLES WHICH COULD CAUSE MECHANICAL INJURY TO THE EYE, WEAR CHEMICAL GOGGLES.

SKIN PROTECTION: WEAR CLEAN, LONG-SLEEVED, BODY-COVERING CLOTHING. USE GLOVES IMPERVIOUS TO THIS MATERIAL.

RESPIRATORY PROTECTION: FOR MOST CONDITIONS, NO RESPIRATORY PROTECTION IS NEEDED; HOWEVER, IF HANDLING AT ELEVATED TEMPERATURES WITHOUT SUFFICIENT VENTILATION, USE AN APPROVED AIR-PURIFYING RESPIRATOR.

ENGINEERING CONTROLS: GOOD GENERAL VENTILATION SHOULD BE SUFFICIENT FOR MOST CONDITIONS. LOCAL EXHAUST VENTILATION MAY BE NECESSARY FOR SOME OPERATIONS.

SECTION 8 - OTHER INFORMATION: THESE PRECAUTIONS ARE SUGGESTED FOR CONDITIONS WITH HIGH POTENTIAL FOR EXPOSURE. IF HANDLING PROCEDURES ARE SUCH THAT THERE IS ONLY A LOW POTENTIAL FOR EXPOSURE, LESS PROTECTION MAY BE NEEDED EMERGENCY CONDITIONS MAY REQUIRE ADDITIONAL PRECAUTIONS.

SECTION 09: PHYSICAL & CHEMICAL PROPERTIES

THEORETICAL VOC WITHOUT WATER: VOLATILE ORGANIC COMPOUNDS (VOC) CONTENT: 0.011; EPA METHOD 24 PROCEDURE B

BOILING POINT TEXT: N/A

SPECIFIC GRAVITY VALUES: = 0.9100

VAPOR DENSITY TEXT: N/A

VAPOR PRESSURE TEXT: N/A

SOLUBILITY IN WATER TEXT: INSOLUBLE

PH OF PRODUCT AS RECEIVED (NEAT)/TEXT: NONE KNOWN

APPEARANCE: WHITE PASTE.

ODOR: MILD ODOR.

SECTION 10: STABILITY & REACTIVITY

STABILITY - TEXT: STABLE

INCOMPATIBLE MATERIALS: STRONG OXIDIZERS.

HAZARDOUS DECOMPOSITION PRODUCTS: CARBON DIOXIDE, CARBON MONOXIDE, SMOKE, FUMES.

HAZARDOUS POLYMERIZATION TEXT: WILL NOT OCCUR.

SECTION 11: TOXICOLOGICAL INFORMATION

SKIN EFFECTS: THE DERMAL LD50 HAS NOT BEEN DETERMINED.

ACUTE ORAL EFFECTS: SINGLE DOSE ORAL LD50 HAS NOT BEEN DETERMINED.

CARCINOGENICITY: NO CONTAINS A PHTHALATE ESTER WHICH PRODUCED AN INCREASED INCIDENCE OF LEUKEMIA IN A 2-YEAR ANIMAL FEEDING STUDY; EFFECTS WERE NOT DOSE RELATED. THERE WERE NO CARCINOGENIC EFFECT OBSERVED IN RATS GIVEN 0.03-0.3% IN THEIR DIET FOR 30 MONTHS. FOR THE MINOR COMPONENT MDI: LUNG TUMORS HAVE BEEN OBSERVED IN LABORATORY ANIMALS EXPOSED TO AEROSOL DROPLETS OF MDI/POLYMERIC MDI (6 MG/M2) FOR THEIR LIFETIME. TUMORS OCCURRED CONCURRENTLY WITH RESPIRATORY IRRITATION AND LUNG INJURY. CURRENT GUIDELINES ARE EXPECTED TO PROTECT AGAINST THESE EFFECTS REPORTED FOR MDI.

MUTAGENICITY: FOR THE PHTHALATE ESTER COMPONENT, IN VITRO MUTAGENICITY STUDIES WERE NEGATIVE.

REPRODUCTIVE EFFECTS: NO RELEVANT INFORMATION FOUND.

SECTION 11 - OTHER INFORMATION: SYSTEMIC (OTHER TARGET ORGAN) EFFECTS: FOR THE PHTHALATE ESTER COMPONENT; LIVER EFFECTS WERE OBSERVED IN RATS GIVEN HIGH DOSES IN THEIR DIET; NO ADVERSE EFFECTS WERE OBSERVED IN REPEATED EXPOSURE INHALATION STUDIES IN SEVERAL ANIMAL SPECIES. // TERATOLOGY (BIRTH DEFECTS): THE PHTHALATE ESTER HAS CAUSED BIRTH DEFECTS IN LABORATORY ANIMALS ONLY AT DOSES TOXIC TO THE MOTHER.

SECTION 12: ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION: FOR DETAILED ECOLOGICAL DATA WRITE OR CALL THE DOW CHEMICAL COMPANY.

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: DISPOSE OF IN COMPLIANCE WITH ALL APPLICABLE FEDERAL, STATE/PROVINCIAL AND LOCAL STATUES REGARDING THE MANAGEMENT, USE HANDLING, TREATMENT, STORAGE, DISPOSAL, AND TRANSPORTATION OF HAZARDOUS WASTES. CUSTOMERS HAVING COMPLIANCE QUESTIONS SHOULD CONTACT THEIR LOCAL, STATE/PROVINCIAL OR FEDERAL ENVIRONMENTAL AGENCY.

SECTION 14: TRANSPORT INFORMATION

DOT INFORMATION: FOR DOT REGULATORY INFORMATION, IF REQUIRED, CONSULT TRANSPORTATION REGULATIONS OR PRODUCT SHIPPING PAPERS.

SECTION 15: REGULATORY INFORMATION

SARA 311/312 HAZARD INDICATORS:
DELAYED HEALTH INDICATOR =

Y

SECTION 15 - OTHER INFORMATION: TOXIC SUBSTANCES CONTROL ACT (TSCA):

ALL INGREDIENTS ARE ON THE TSCA INVENTORY OR ARE NOT REQUIRED TO BE LISTED ON THE TSCA INVENTORY. // SARA 313 INFORMATION: TO THE BEST OF OUR KNOWLEDGE, THIS PRODUCT CONTAINS NO CHEMICAL SUBJECT TO SARA TITLE III SECTION 313 SUPPLIER NOTIFICATION REQUIREMENTS. // TOXIC SUBSTANCES CONTROL ACT (TSCA): ALL INGREDIENTS ARE ON THE TSCA INVENTORY OR ARE NOT REQUIRED TO BE LISTED ON THE TSCA INVENTORY. // STATE RIGHT-TO-KNOW: THIS PRODUCT IS NOT KNOWN TO CONTAIN ANY SUBSTANCES SUBJECT TO THE DISCLOSURE REQUIREMENTS OF NEW JERSEY AND PENNSYLVANIA // OSHA HAZARD COMMUNICATION STANDARD: THIS PRODUCT IS A HAZARDOUS CHEMICAL AS DEFINED BY THE OSHA HAZARD COMMUNICATION STANDARD, 29 CFR 1910.1200. // CANADIAN REGULATIONS: WHMIS INFORMATION: THE CANADIAN WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM (WHMIS) CLASSIFICATION FOR THIS PRODUCT IS: THIS PRODUCT IS EXEMPT UNDER WHMIS.