

#ALUMISEAL

PRODUCT NAME: #ALUMISEAL
 PRODUCT CODE: ALU

HMIS CODES: H F R P
 3 3 1 K

===== SECTION I - MANUFACTURER IDENTIFICATION =====

MANUFACTURER'S NAME: UNITED COATING MANUFACTURING CO
 ADDRESS : 19011 EAST CATALDO ROAD
 GREENACRES, WASHINGTON 99016-9423
 INITIAL(FIRST CALL)CHEMTREC(800)424-9300
 EMERGENCY PHONE : BACK-UP(800)541-4383 DATE PRINTED : 7/8/03
 DATE REVISED : AUGUST 1996
 INFORMATION PHONE : (509) 926-7143 NAME OF PREPARER : ENVIRONMENTAL SECT.

===== SECTION II - HAZARDOUS INGREDIENTS/SARA III INFORMATION =====

REPORTABLE COMPONENTS	CAS NUMBER	VAPOR PRESSURE MM HG @ TEMP	WEIGHT PERCENT
* POLYISOCYANATE BASED ON MDI, APPROX. 76%. (22% MDI, CAS #101-68-8).MIXTURE<10-POLYISOCYANATE BASED ON MDI, CAS#TRADE SECRET, APPROXIMATELY 76%, NJTSR NO. (NEW JERSEY TRADE SECRET REGISTRY NUMBER 31765300002-5317P) NO OCCUPATIONAL EXPOSURE LIMITS HAVE BEEN ESTABLISHED FOR THIS CHEMICAL. DIPHENYLMETHANE DIISOCYANATE(MDI)(2,2; 2,4), CAS#26447-40-5, APPROXIMATELY 1.4%, NO OEL'S HAVE BEEN ESTABLISHED FOR THIS CHEMICAL. NON-ISOMER SPECIFIC CAS NUMBER INCLUDES 2,2' MDI AND 2,4' MDI. 4,4'-DIPHENYLMETHANE DIISOCYANATE(MDI), CAS #101-68-8, APPROXIMATELY 22%, OSHA-.02PPM CEILING, .20MG.M3 CEILING, ACGIH-.005PPM TWA, .051MG/M3 TWA.			
* XYLENE CAS#1330-20-7, 75%+/-5.(ETHYL BENZENE CAS# 100-41-4, 25%+/-5).1330-20-7 XYLENE, MIXED ISOMERS, CAS# 1330-20-7, 75%+/-5%, ACGIH TLV-100PPM TWA, STEL-150PPM, OSHA PEL-100PPM TWA, STEL-150PPM. ETHYLBENZENE, CAS#100-41-4, 25%+/-5%, ACGIH TLV-100PPM TWA, STEL-125PPM, OSHA PEL-100PPM TWA, STEL-125PPM. #TOLUENE CAS#108-88-3, 0.3%-1.5%, ACGIH TLV-50PPM TWA (SKIN), OSHA PEL-100PPM TWA, STEL-150PPM. NOTE: FLASH POINT MAY VARY FROM 80F/26.7C TO			
* XYLENE (MIXED ISOMERS)	1330-20-7	5.1 68F/20C	25
XYLENE (MIXED ISOMERS), CAS# 1330-20-7, ACGIH TLV-100PPM TWA, STEL-150PPM, OSHA PEL-100PPM, STEL-150PPM. #TOLUENE CAS#108-88-3, 0.3-1.5%, ACGIH TLV-50 PPM TWA (SKIN), OSHA PEL-100 PPM TWA,STEL-150 PPM. NOTE: FLASH POINT MAY VARY FROM 80F/26.7C			
ALUMINUM PASTE	MIXTURE	2.03 68F/20C	17
ALUMINUM, CAS # 7429-90-5, 60-70%, OSHA; 5MG/M3 RESPIRABLE, 15 MG/M3 DUST, ACGIH TLV: 5MG/M3 FUME, 10 MG/M3 DUST. STODDARD SOLVENT CAS # 8052-41-3, 23 -30%, OSHA; 500PPM, ACGIH 100 PPM. STEARIC ACID, CAS # 57-11-4, 1-3%, OSHA 15 MG/M3 TOTAL DUST, 5 MG/M3 RESPIRABLE DUST, ACGIH: 10 MG/M3 TOTAL DUST.			
* ETHYLBENZENE	100-41-4	5.1 68F/20C	8
ETHYLBENZENE, CAS# 100-41-4, AGCHI: TLV-100PPM, STEL-125PPM. OSHA PEL-100PP M, STEL 125PPM.			
# RHEOLOGICAL ADDITIVE	MIXTURE	N/A N/A	.9
#CRYSTALLINE SILICA, QUARTZ, CAS# 14808-60-7, <1.0%. ACGIH TLV, 8 HOUR TWA-10MG/M3, TOTAL, 8HOUR TWA-5MG/M3, RESPIRABLE. ACGIH TLV, QUARTZ-0.1MG/M3. OSHA PEL, 8 HOUR TWA-10MG/M3, TOTAL, 8 HOUR TWA-5MG/M3, RESPIRABLE.			

* Indicates toxic chemical(s) subject to the reporting requirements of section 313 of Title III and of 40 CFR 372.
 # INDICATES CARCINOGENIC CHEMICAL. CRYSTALLINE SILICA IS < 0.1% AS CONTAINED IN THIS PRODUCT. THIS MSDS MAY BE USED FOR OTHER COLORS AND CONTAINER SIZES OF THIS

PRODUCT.

===== SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS =====

BOILING RANGE: 282F/138.9C - 694F/368C SPECIFIC GRAVITY (H2O=1): 1.0642
VAPOR DENSITY: HEAVIER THAN AIR EVAPORATION RATE: SLOWER THAN ETHER
COATING V.O.C.: 3.53 lb/gl COATING V.O.C.: 424 g/l
MATERIAL V.O.C.: 3.53 lb/gl MATERIAL V.O.C.: 424 g/l
SOLUBILITY IN WATER: INSOLUBLE-REACTS.
APPEARANCE AND ODOR: SLIGHTLY THIXOTROPIC LIQUID, WITH AN AROMATIC ODOR.

===== SECTION IV - FIRE AND EXPLOSION HAZARD DATA =====

FLASH POINT: 80F/26C SETA FLASH CLOSED CUP.
FLAMMABLE LIMITS IN AIR BY VOLUME- LOWER: 1 UPPER: 7

EXTINGUISHING MEDIA: FOAM, CO2, DRY CHEMICAL, WATER FOG

SPECIAL FIREFIGHTING PROCEDURES

DO NOT ENTER ANY ENCLOSED OR CONFINED SPACE WITHOUT FULL PROTECTIVE EQUIPMENT, INCLUDING SELF-CONTAINED BREATHING APPARATUS (PRESSURE-DEMAND MSHA/NIOSH APPROVED OR EQUIVALENT) TO PROTECT AGAINST THE HAZARDOUS EFFECTS OF COMBUSTION PRODUCTS AND OXYGEN DEFICIENCY.

UNUSUAL FIRE AND EXPLOSION HAZARDS

WATER CONTAMINATION WILL PRODUCE CARBON DIOXIDE. DO NOT RESEAL CONTAMINATED CONTAINERS AS PRESSURE BUILDUP MAY RUPTURE THEM.

===== SECTION V - REACTIVITY DATA =====

STABILITY: STABLE

CONDITIONS TO AVOID

AVOID PROLONGED HEATING OVER 160F/71C OR STORAGE BELOW 40F/4.4C. INCOMPATIBLE WITH WATER, STRONG BASES, ALCOHOL, STRONG ACIDS.

INCOMPATIBILITY (MATERIALS TO AVOID)

AVOID WATER, ALCOHOL, AMMONIA, AMINES, ALKALIES AND ACIDS. SOME REACTIONS CAN BE VIOLENT.

HAZARDOUS DECOMPOSITION OR BYPRODUCTS

PRODUCTS OF COMBUSTION INCLUDE ISOCYANATE VAPOR & MIST, CARBON MONOXIDE, CARBON DIOXIDE, HYDROGEN CYANIDE, NITROGEN OXIDES AND SULFUR OXIDES AND UNIDENTIFIED PRODUCTS IN FUMES AND SMOKE.

HAZARDOUS POLYMERIZATION: MAY OCCUR. CONTACT WITH MOISTURE OR OTHER MATERIALS WHICH REACT WITH ISOCYANATES MAY CAUSE POLYMERIZATION.

===== SECTION VI - HEALTH HAZARD DATA =====

INHALATION HEALTH RISKS AND SYMPTOMS OF EXPOSURE

REPEATED OR PROLONGED EXPOSURE TO VAPORS OR MISTS ARE IRRITATING TO THE RESPIRATORY TRACT. MAY CAUSE HEADACHES, DIZZINESS, ANESTHESIA, DROWSINESS, UNCONSCIOUSNESS AND OTHER CENTRAL NERVOUS SYSTEM EFFECTS, INCLUDING DEATH. INHALATION OF VAPORS AND MISTS OF ISOCYANATE AT CONCENTRATIONS ABOVE RECOMMENDED EXPOSURE LIMITS CAN IRRITATE THE MUCOUS MEMBRANES IN THE RESPIRATORY TRACT (NOSE, THROAT, LUNGS) CAUSING RUNNY NOSE, SORE THROAT, COUGHING, CHEST DISCOMFORT, SHORTNESS OF BREATH AND REDUCED LUNG FUNCTION. PERSONS WITH A PREEXISTING, NONSPECIFIC BRONCHIAL HYPERREACTIVITY CAN RESPOND TO CONCENTRATIONS BELOW THE INTENDED RECOMMENDED EXPOSURE LEVEL WITH SIMILAR SYMPTOMS AS WELL AS AN ASTHMA ATTACK. EXPOSURE TO HIGHER LEVELS MAY LEAD TO BRONCHITIS, BRONCHIAL SPASM AND PULMONARY EDEMA (FLUID IN THE LUNGS). THESE EFFECTS ARE USUALLY REVERSIBLE. CHEMICAL OR HYPERSENSITIVE PNEUMONITIS, WITH FLU-LIKE SYMPTOMS (e.g., FEVER, CHILLS) HAS ALSO BEEN REPORTED.

SKIN AND EYE CONTACT HEALTH RISKS AND SYMPTOMS OF EXPOSURE

EYES: CONTACT WITH EYES MAY LEAD TO IRRITATION AND TEARING. ISOCYANATE IS REPORTED TO INDUCE CHEMICAL BURNS IN RABBIT EYE STUDIES. A SIMILAR DEGREE OF EYE INJURY MAY DEVELOP AFTER CONTACT WITH HUMAN EYES.

SKIN: SKIN ABSORPTION IS BELIEVED TO GENERALLY BE TOO SLOW TO PRODUCE SIGNS OF ACUTE SYSTEMIC POISONING. HOWEVER, ANIMAL STUDIES HAVE SHOWN THAT RESPIRATORY SENSITIZATION CAN BE INDUCED BY SKIN CONTACT WITH KNOWN RESPIRATORY SENSITIZERS, INCLUDING ISOCYANATES. ISOCYANATES ARE A PRIMARY SKIN IRRITANT--THEY REACT WITH SKIN PROTEIN AND MOISTURE AND CAN CAUSE IRRITATION. SYMPTOMS CAN INCLUDE: REDNESS, SWELLING, RASH, SCALING OR BLISTERING. ISOCYANATES ARE ALSO STRONG SKIN SENSITIZERS. EXPERIENCE INDICATES THAT DIRECT SKIN CONTACT IS THE ROUTE OF EXPOSURE MOST LIKELY TO CAUSE SKIN SENSITIZATION. ONCE SENSITIZED, AN INDIVIDUAL MAY REACT EVEN TO AIRBORNE LEVELS BELOW THE TLV WITH THE FOLLOWING SYMPTOMS; ITCHING AND TINGLING OF THE EARLOBES AND NECK, RASH, HIVES, SWELLING OF THE ARMS AND LEGS OR OTHER SYMPTOMS COMMON TO ALLERGIC DERMITITUS. THESE SYMPTOMS MAY BE IMMEDIATE OR DELAYED SEVERAL HOURS. PROLONGED CONTACT CAN CAUSE REDDING, SWELLING, RASH, SCALING OR BLISTERING. IN THOSE WHO HAVE DEVELOPED A SKIN SENSITIZATION, THESE SYMPTOMS CAN DEVELOP AS A RESULT OF CONTACT WITH VERY SMALL AMOUNTS OF LIQUID MATERIAL OR EVEN AS A RESULT OF VAPOR-ONLY EXPOSURE.

SKIN ABSORPTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE

SKIN ABSORPTION IS BELIEVED TO GENERALLY BE TOO SLOW TO PRODUCE SIGNS OF ACUTE SYSTEMIC POISONING. HOWEVER, ANIMAL STUDIES HAVE SHOWN THAT RESPIRATORY SENSITIZATION CAN BE INDUCED BY SKIN CONTACT WITH KNOWN RESPIRATORY SENSITIZERS, INCLUDING ISOCYANATES. ISOCYANATES ARE A PRIMARY SKIN IRRITANT--THEY REACT WITH SKIN PROTEIN AND MOISTURE AND CAN CAUSE IRRITATION. SYMPTOMS CAN INCLUDE: REDNESS, SWELLING, RASH, SCALING OR BLISTERING. ISOCYANATES ARE ALSO STRONG SKIN SENSITIZERS. EXPERIENCE INDICATES THAT DIRECT SKIN CONTACT IS THE ROUTE OF EXPOSURE MOST LIKELY TO CAUSE SKIN SENSITIZATION. ONCE SENSITIZED, AN INDIVIDUAL MAY REACT EVEN TO AIRBORNE LEVELS BELOW THE TLV WITH THE FOLLOWING SYMPTOMS; ITCHING AND TINGLING OF THE EARLOBES AND NECK, RASH, HIVES, SWELLING OF THE ARMS AND LEGS OR OTHER SYMPTOMS COMMON TO ALLERGIC DERMITITUS. THESE SYMPTOMS MAY BE IMMEDIATE OR DELAYED SEVERAL HOURS. PROLONGED CONTACT CAN CAUSE REDDING, SWELLING, RASH, SCALING OR BLISTERING. IN THOSE WHO HAVE DEVELOPED A SKIN SENSITIZATION, THESE SYMPTOMS CAN DEVELOP AS A RESULT OF CONTACT WITH VERY SMALL AMOUNTS OF LIQUID MATERIAL OR EVEN AS A RESULT OF VAPOR-ONLY EXPOSURE.

INGESTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE

SWALLOWING MAY RESULT IN LOCAL IRRITATION AND CENTRAL NERVOUS SYSTEM EXCITATION AND DEPRESSION. VOMITING MAY ALSO RESULT. DO NOT ALLOW VOMITUS TO BE BREATHED INTO THE LUNGS, AS CHEMICAL PNEUMONITIS AND PULMONARY EDEMA/HEMORRHAGE IS

POSSIBLE. THE ISOCYANATE IN THIS PRODUCT IS CLASSIFIED AS "PRACTICALLY NON-TOXIC" BY INGESTION. IN HUMANS, IRRITATION OR CHEMICAL BURNS OF THE MOUTH, PHARYNX, ESOPHAGUS AND STOMACH CAN DEVELOP FOLLOWING INGESTION. INJURY MAY BE SEVERE AND CAUSE DEATH.

HEALTH HAZARDS (ACUTE AND CHRONIC)

EUPHORIA & CENTRAL NERVOUS DEPRESSION, INCLUDING IMPAIRED MOTOR COORDINATION, SLURRED SPEECH, STUPOR, LOSS OF MUSCLE COORDINATION & COMA. DEATH MAY OCCUR DUE TO RESPIRATORY ARREST & CONSEQUENT ASPHYXIA. A POTENT SKIN AND LUNG SENSITIZER. ALLERGIC REACTIONS TO THIS PRODUCT MAY DEVELOP WITH CLASSIC SYMPTOMS OF ALLERGIC DERMATITIS: ITCHING, TINGLING, RASH, HIVES & SWELLING. INDIVIDUALS SENSITIZED TO ISOCYANATES SHOULD AVOID EXPOSURES EVEN BELOW RECOMMENDED EXPOSURE LEVELS.

CARCINOGENICITY: NTP CARCINOGEN: YES
IARC MONOGRAPHS: YES
OSHA REGULATED: YES

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE

ASTHMA, OTHER RESPIRATORY DISORDERS (BRONCHITIS, EMPHYSEMA, BRONCHIAL HYPERREACTIVITY), SKIN ALLERGIES & ECZEMA.

EMERGENCY AND FIRST AID PROCEDURES

EYE: FLUSH WITH CLEAN, LUKEWARM WATER FOR 15 MINUTES WHILE LIFTING EYELIDS. REFER TO PHYSICIAN OR OPHTHALMOLOGIST FOR IMMEDIATE FOLLOW-UP. SKIN: REMOVE CONTAMINATED CLOTHING IMMEDIATELY. WASH AFFECTED AREAS WITH SOAP AND WATER. AFTER WASHING, COVER AFFECTED SKIN WITH POLYETHYLENE GLYCOL(300-500 MOL WT) AND WASH AGAIN IMMEDIATELY WITH SOAP AND WATER TO THOROUGHLY REMOVE POLYETHYLENE GLYCOL AND RESIDUAL ISOCYANATE. WASH CLOTHING BEFORE REUSE. FOR SEVERE EXPOSURES, GET UNDER SAFETY SHOWER AND GET MEDICAL ATTENTION IF IRRITATION OR ALLERGIC DERMATITIS SYMPTOMS DEVELOP, OR IF GROSS EXPOSURE DEVELOPS. FOR LESSER EXPOSURES, SEEK MEDICAL ATTENTION IF IRRITATION PERSISTS. INHALATION: MOVE TO FRESH AIR, ADMINISTER OXYGEN BY A QUALIFIED INDIVIDUAL OR ARTIFICIAL RESPIRATION AS NEEDED. GET MEDICAL ATTENTION. ASTHMATIC-TYPE SYMPTOMS MAY DEVELOP AND MAY BE IMMEDIATE OR DELAYED SEVERAL HOURS. TREATMENT IS ESSENTIALLY SYMPTOMATIC. INGESTION: DO NOT INDUCE VOMITING. GIVE 1 TO 2 CUPS MILK OR WATER. IF VOMITING OCCURS, KEEP VICTOM'S HEAD BELOW THE HIPS TO PREVENT BREATHING VOMITUS INTO THE LUNGS. CONSULT PHYSICIAN IMMEDIATELY.

NOTE TO PHYSICIAN.

EYES- STAIN FOR EVIDENCE OF CORNEAL INJURY. IF CORNEA IS BURNED, INSTILL ANTIBIOTIC/STEROID PREPARATION FREQUENTLY. WORKPLACE VAPORS COULD PRODUCE REVERSABLE CORNEAL EPITHELIAL EDEMA IMPAIRING VISION.

SKIN- THIS COMPOUND IS A POTENT SKIN SENSITIZER. TREAT SYMPTOMATICALLY AS FOR CONTACT DERMITITIS OR THERMAL BURN.

INGESTION- TREAT SYMPTOMATICALLY. THERE IS NO SPECIFIC ANTIDOTE. INDUCING VOMITING IS CONTRAINDICATED BECAUSE OF THE IRRITATING NATURE OF THE COMPOUND.

INHALATION- TREATMENT IS ESSENTIALLY SYMPTOMATIC. AN INDIVIDUAL HAVING A DERMAL OR PULMONARY SENSITIZATION REACTION TO THIS MATERIAL SHOULD BE REMOVED FROM ANY EXPOSURE TO ISOCYANATE.

===== SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE =====

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

CLEAR THE AREA OF UNNECESSARY PERSONNEL. SHUT DOWN HVAC EQUIPMENT IF INSIDE BUILDING OR NEAR HVAC SYSTEM TO PREVENT CONTAMINATING BUILDING. VENTILATE AREA AS VAPORS ARE HARMFUL, HEAVIER THAN AIR AND ARE FLAMMABLE OR COMBUSTABLE AND MAY MIGRATE TO AN IGNITION SOURCE. USE ONLY EXPLOSION PROOF EQUIPMENT. INSURE A TRAINED RESPONSE TEAM IS IN EMERGENCY PROTECTIVE EQUIPMENT. PREVENT FURTHER SPILLAGE AND CONTAIN THE SPILL USING DIKES MADE OF SAND, EARTH OR SPILL PILLOWS. COVER THE SPILL AREA WITH A NON-COMBUSTABLE ABSORBANT MATERIAL (E.G., ABSORBANT CLAY, EARTH, SAND) TO ABSORB AS MUCH LIQUID AS POSSIBLE. USING NON SPARKING TOOLS, CAREFULLY SHOVEL THE ABSORBANT INTO OPEN TOP CONTAINERS. DO NOT FILL TO THE TOP OR COVER THE CONTAINERS. PREPARE A DECONTAMINATING SOLUTION AS FOLLOWS:
OPTION 1: CONSISTS OF A SOLUTION 90% WATER, 8% CONCENTRATED AMMONIA SOLUTION AND 2% LIQUID DETERGENT.
OPTION 2: CONSISTS OF A SOLUTION 90-95% WATER, 5-10% SODIUM CARBONATE AND 0.2-0.5% LIQUID DETERGENT.

POUR THE LIQUID DECONTAMINANT LIBERALLY OVER THE REMAINING SPILL AREA AND SPREAD WITH A BROOM OR SQUEEGEE TO INSURE CONTACT. LET STAND 10-15 MINUTES @25C(77F), LONGER AT LOWER TEMPERATURES. THEN WASH DOWN THE AREA WITH PLENTY OF WATER. IN A WELL VENTILATED AREA, ADD ENOUGH LIQUID DECONTAMINANT SOLUTION TO THE CONTAINERS WITH THE ABSORBED SPILL MATERIAL TO OBTAIN AN APPROXIMATE 10:1 RATIO OF DECONTAMINANT SOLUTION TO SPILL MATERIAL. MIX THE LIQUID-ABSORBANT SLURRY AND LET STAND FOR 12-24 HOURS. STIR PERIODICALLY, OR THE LIQUID-ABSORBANT SLURRY MAY SOLIDIFY. LEAVE THE LIDS ON LOOSELY. AFTER DECONTAMINATION SOLUTION HAS BEEN IN CONTACT WITH THE SPILLED MATERIAL FOR 24-48 HOURS, AND THE EVOLVED CARBON DIOXIDE HAS VENTED AWAY, TIGHTEN DOWN THE LIDS AND DISPOSE OF THE MIXTURE IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS. TEST THE AREA FOR RESIDUAL SOLVENT AND ISOCYANATE VAPORS BEFORE ALLOWING WORKERS TO RE-ENTER THE AREA. WHEN SAFE WORKING CONDITIONS HAVE BEEN RE-ESTABLISHED, REMOVE AND DECONTAMINATE ALL EQUIPMENT USED.

LARGE SPILLS:

CLEAR THE AREA OF ALL NON-ESSENTIAL PERSONNEL. STAY UP-WIND TO AVOID BREATHING VAPOR. IF INSIDE A BUILDING, OR NEAR HVAC EQUIPMENT, SHUT DOWN THE HVAC SYSTEM AND VENTILATE THE AREA AS VAPORS ARE HARMFUL AND FLAMMABLE OR COMBUSTABLE AND MAY MIGRATE TO A SOURCE OF IGNITION.(IF MECHANICAL VENTILATION EQUIPMENT IS TO BE USED TO VENTILATE THE AREA, USE ONLY EXPLOSION PROOF EQUIPMENT). PREVENT ACCESS TO AREA. NOTIFY THE APPROPRIATE STATE, LOCAL AND FEDERAL AUTHORITIES AS WELL AS THE MATERIAL SUPPLIER. INSURE A TRAINED RESPONSE TEAM IS IN APPROPRIATE EMERGENCY EQUIPMENT. PREVENT FURTHER SPILLAGE. CONTAIN THE SPILL USING SAND BAGS, SPILL PILLOWS, DIRT DIKES, ETC. IT IS IMPORTANT THAT THIS MATERIAL NOT BE ALLOWED TO ENTER DRAINS. THE REACTION WITH WATER CAN BE VIOLENT AND FORMS AN INSOLUBLE MATERIAL WHICH MAY CAUSE BLOCKAGE. IF THIS MATERIAL DOES ENTER DRAINS, FLUSH WITH AMPLE QUANTITIES OF WATER AND NOTIFY THE SEWER AUTHORITY IMMEDIATELY. ABSORB THE SPILL AND DECONTAMINATE THE SPILL AREA AND ABSORBED MATERIAL AS IN SMALL SPILL ABOVE. WASH DOWN THE AREA ONE MORE TIME WITH THE DECONTAMINATION SOLUTION. TEST THE ATMOSPHERE FOR RESIDUAL SOLVENT AND ISOCYANATE VAPORS BEFORE ALLOWING OTHERS TO RE-ENTER THE AREA. WHEN SAFE CONDITIONS HAVE BEEN REESTABLISHED, REMOVE AND DECONTAMINATE ALL EQUIPMENT USED.

SOLIDIFIED SPILLAGE:

WHERE SPILLS HAVE SOLIDIFIED, SANDBLASTING IS THE PREFERRED REMOVAL METHOD, PARTICULARLY FOR ROAD SPILLS. WEAR SPECIAL PROTECTIVE CLOTHING FOR SANDBLASTING, ALONG WITH SELF-CONTAINED BREATHING EQUIPMENT. CONTAMINATED SAND MUST BE COLLECTED FOR DECONTAMINATION AND DISPOSAL.

WASTE DISPOSAL METHOD

DISPOSE OF CONTAMINATED PRODUCT AND MATERIALS USED IN CLEANING UP SPILLS OR LEAKS IN A MANNER APPROVED FOR THIS MATERIAL. CONSULT APPROPRIATE FEDERAL, STATE AND LOCAL REGULATORY AGENCIES TO ASCERTAIN PROPER DISPOSAL PROCEDURES. EMPTY CONTAINERS WILL RETAIN PRODUCT RESIDUE AND VAPORS AND ARE SUBJECT TO PROPER WASTE DISPOSAL, AS ABOVE.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING

STORE IN A COOL, DRY WELL VENTILATED AREA IN TIGHTLY CLOSED CONTAINERS TO PREVENT MOISTURE CONTAMINATION. UNUSED PRODUCT REMAINING IN OPENED CONTAINERS MUST BE PURGED WITH DRY NITROGEN BEFORE RESEALING TO PREVENT CO2 PRESSURE BUILD-UP DUE TO MOISTURE CONTAMINATION. IF MOISTURE OR WATER CONTAMINATION IS SUSPECTED, DO NOT RESEAL. OPEN SEALED DRUMS SLOWLY TO RELEASE ANY PRESSURE DUE TO POSSIBLE CO2 PRESSURE BUILD-UP.

OTHER PRECAUTIONS

DO NOT PUNCTURE, CUT, GRIND, WELD, BRAZE, SOLDER OR DRILL ON OR NEAR THIS CONTAINER OR OTHERWISE EXPOSE SUCH CONTAINER TO HEAT, FLAME, SPARKS, STATIC ELECTRICAL CHARGES, ELECTRICITY OR OTHER SOURCES OF IGNITION. THEY MAY EXPLODE AND/OR EMIT TOXIC VAPORS RESULTING IN INJURY OR DEATH. CLOSED CONTAINERS MAY EXPLODE DUE TO PRESSURE BUILD-UP IF EXPOSED TO WATER OR MOISTURE OR EXTREME HEAT. CONTAINERS, EVEN THOSE THAT HAVE BEEN EMPTIED, WILL RETAIN PRODUCT RESIDUE AND VAPORS. ALWAYS OBEY HAZARD WARNINGS AND HANDLE EMPTY CONTAINERS AS IF THEY WERE FULL. DO NOT GET IN EYES, ON SKIN OR ON CLOTHING. AVOID PROLONGED OR REPEATED BREATHING OF VAPOR OR SPRAY MIST. USE ONLY IN A WELL VENTILATED AREA. KEEP OUT OF THE REACH OF CHILDREN.

===== SECTION VIII - CONTROL MEASURES =====

RESPIRATORY PROTECTION

FOLLOW OSHA REGULATION 29 CFR 1910.134 FOR RESPIRATOR USE. WHERE OVERSPRAY IS PRESENT, OR IF CONCENTRATION OF SOLVENTS AND ISOCYANATES IS NOT KNOWN OR ARE ABOVE THE EXPOSURE GUIDELINE OF .005 PPM FOR ISOCYANATES, USE POSITIVE PRESSURE AIR SUPPLIED EQUIPMENT.

VENTILATION

IF CURRENT VENTILATION PRACTICES ARE NOT ADEQUATE DURING MIXING AND APPLICATION OPERATIONS TO MINIMIZE EXPOSURE, USE EXPLOSION-PROOF LOCAL EXHAUST VENTILATION CAPABLE OF MAINTAINING EMISSIONS AT THE POINT OF USE BELOW THE PEL OR TLV OR OTHER EXPOSURE GUIDELINES, AS APPROPRIATE. VENTILATION RATES SHOULD BE MATCHED TO CONDITIONS. EXPLOSION-PROOF MECHANICAL EXHAUST VENTILATION, WITH VOLUME AND PATTERN CAPABLE OF MAINTAINING A FRESH AIR SUPPLY, MAY BE NECESSARY IN CONFINED SPACES. REFER TO OSHA STANDARD 29 CFR 1910.94 FOR GUIDELINES. TURN OFF HEATING AND/OR AIR CONDITIONING EQUIPMENT TO PREVENT CONTAMINATING BUILDING.

PROTECTIVE GLOVES

CHEMICAL RESISTANT GLOVES DETERMINED TO BE IMPERVIOUS UNDER THE CONDITIONS OF USE.

EYE PROTECTION

CHEMICAL GOGGLES. IF SPLASHING MAY OCCUR OR DURING SPRAY OPERATIONS WEAR A FACE SHIELD, UNLESS A FULL FACE PIECE RESPIRATOR IS USED. DO NOT WEAR CONTACT LENSES

AS THEY MAY CONTRIBUTE TO THE SEVERITY OF INJURY TO THE EYE FROM CONTACT WITH LIQUID AND SPRAY MIST.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT

ADDITIONAL PROTECTION MAY CONSIST OF APRONS, ARM COVERS OR A FULL BODY SUIT. TESTING OF SOME COMMERCIALY AVAILABLE PROTECTIVE CLOTHING INDICATES THAT CLOTHING CONSTRUCTED OF BUTYL RUBBER, NITRILE RUBBER, SARANEX COATED TYVEK AND SOME NEOPRENE GARMENTS HAVE EXCELLENT RESISTANCE TO PERMEATION BY ISOCYANATES. CLOTHING CONSTRUCTED OF NEOPRENE/LATEX RUBBER AND SOME PVC GARMENTS EXHIBITED LIMITED RESISTANCE TO PERMEATION BY ISOCYANATES. CLOTHING CONSTRUCTED OF POLYETHYLENE, LATEX RUBBER, PVC OR POLYLAMINATED TYVEK SHOWED LITTLE RESISTANCE TO PERMEATION BY ISOCYANATES. PROTECTIVE CLOTHING SHOULD BE SELECTED AND USED IN ACCORDANCE WITH "GUIDELINES FOR THE SELECTION OF CHEMICAL PROTECTIVE CLOTHING" PUBLISHED BY ACGIH. (AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIAL HYGIENISTS).

WORK/HYGIENIC PRACTICES

WASH AT THE END OF EACH WORKSHIFT AND BEFORE EATING, SMOKING OR USING THE TOILET. PROMPTLY REMOVE CONTAMINATED CLOTHING AND LAUNDRY BEFORE WEARING. DISCARD CONTAMINATED LEATHER ARTICLES. EXAMINE PROTECTIVE GLOVES AND CLOTHING BEFORE USE. DISCARD UPON FINDING EVIDENCE OF HOLES CRACKS OR LEAKS.

TRANSPORTATION INFORMATION:

DOT INFORMATION - 49 CFR 172.101 DOT
DESCRIPTION - FLAMMABLE LIQUID, TOXIC, N.O.S.
(CONTAINS XYLENE AND ISOCYANATES), 3+6 no #, UN 1992, III

ADDITIONAL REGULATORY:

STATUS OF SUBSTANCE LISTS: THE CONCENTRATIONS SHOWN IN SECTION II ARE MAXIMUM FOR CEILING LEVELS (WEIGHT %) TO BE USED FOR CALCULATIONS FOR REGULATIONS. FEDERAL EPA: COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION AND LIABILITY ACT OF 1980 (CERCLA) REQUIRES NOTIFICATION OF THE NATIONAL RESPONSE CENTER OF RELEASE OF QUANTITIES OF HAZARDOUS SUBSTANCES EQUAL TO OR GREATER THAN THE REPORTABLE QUANTITIES (RQs) IN 40 CFR 302.4.

COMPONENTS PRESENT IN THIS PRODUCT AT A LEVEL THAT COULD REQUIRE REPORTING UNDER THE STATUTE ARE:

XYLENE (MIXED ISOMERS) CAS #1330-20-7 RQ100#
ETHYL BENZENE CAS #100-41-4 RQ1000#
DIPHENYLMETHANE-4,4-DIISOCYANATE (MDI) CAS #101-68-8 RQ 5000#.

SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 (SARA) TITLE III

REQUIRES EMERGENCY PLANNING BASED ON THRESHOLD PLANNING QUANTITIES (TPQs) AND RELEASE REPORTING BASED ON REPORTABLE QUANTITIES (RQs) IN 40 CFR 355 (USED FOR SARA 302, 304, 311 AND 312).

COMPONENTS PRESENT IN THIS PRODUCT AT A LEVEL THAT COULD REQUIRE REPORTING UNDER THE STATUTE ARE:

XYLENE(MIXED ISOMERS CAS#1330-20-7 RQ100#.
ETHYLBENZENE CAS#100-41-4 RQ 1000#.
DIPHENYLMETHANE-4,4-DIISOCYANATE (MDI) CAS#108-68-8 RQ 5000#.

REQUIRES SUBMISSION OF ANNUAL REPORTS OF RELEASE OF TOXIC CHEMICALS THAT APPEAR

IN 40 CFR 372 (FOR SARA 313). THIS INFORMATION MUST BE INCLUDED IN ALL MSDSs THAT ARE COPIED AND DISTRIBUTED FOR THIS MATERIAL.

COMPONENTS PRESENT IN THIS PRODUCT AT A LEVEL THAT COULD REQUIRE REPORTING UNDER THE STATUTE ARE: SEE SECTION II.

STATE RIGHT TO KNOW:

CALIFORNIA PROPOSITION 65: BENZENE, CAS #71-43-2 (TRACE, LESS THAN 0.10%) FEBRUARY 27, 1987, KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER.

IN ADDITION TO THE ABOVE NAMED CHEMICALS, IF ANY, THIS PRODUCT MAY CONTAIN TRACE AMOUNTS OF SOME CHEMICALS CONSIDERED BY THE STATE OF CALIFORNIA TO BE CARCINOGENS OR REPRODUCTIVE TOXICANTS.

TOXIC SUBSTANCES CONTROL ACT (TSCA) STATUS:

THE COMPONENTS OF THIS PRODUCT ARE LISTED OR ARE EXCLUDED FROM LISTING ON THE U.S. TOXIC SUBSTANCES CONTROL ACT (TSCA) CHEMICAL SUBSTANCE INVENTORY.

THE REMAINING PERCENTAGE OF UNSPECIFIED INGREDIENTS, IF ANY, ARE NOT CONTAINED IN ABOVE de minimis CONCENTRATIONS AND/OR ARE BELIEVED TO BE NON-HAZARDOUS UNDER THE OSHA HAZARD COMMUNICATION STANDARD (29 CFR 1910.1200), AND MAY CONSIST OF PIGMENTS, FILLERS, DEFOAMERS, WETTING AGENTS, ANTI-BACTERIAL AGENTS, RESINS, DRYERS, WATER AND/OR SOLVENTS IN VARYING CONCENTRATIONS.

DISCLAIMER:

THE INFORMATION CONTAINED HEREIN IS FURNISHED WITHOUT WARRANTY OF ANY KIND. USERS SHOULD CONSIDER THESE DATA ONLY AS A SUPPLEMENT TO OTHER INFORMATION GATHERED BY THEM & DETERMINE THE SUITABILITY & COMPLETENESS OF INFORMATION FROM ALL SOURCES TO ASSURE PROPER USE & DISPOSAL OF THESE MATERIALS & THE SAFETY & HEALTH OF EMPLOYEES & CUSTOMERS.