

MATERIAL SAFETY DATA SHEET

PRODUCT NAME: CHEM-THANE 2821 M/C URETHANE INT.
PRODUCT CODE: 2821

HMIS CODES: H F R P
2 3 1 K

SECTION I - MANUFACTURER IDENTIFICATION

MANUFACTURER'S NAME: INDMAR COATINGS CORP.
ADDRESS: P.O. BOX 456, WAKEFIELD, VA 23888
EMERGENCY PHONE: 1-757-899-3807
DATE REVISED: 2/97

INFORMATION PHONE: 1-757-899-3807
NAME OF PREPARER: M. WHITED

SECTION II - HAZARDOUS INGREDIENTS/SARA III INFORMATION

HAZARDOUS COMPONENTS	CAS NUMBER	OCCUPATIONAL EXPOSURE LIMITS			VAPOR PRESSURE mm Hg @ TEMP	WEIGHT PERCENT
		OSHA PEL	ACGIH TLV	OTHER		
*SUPER HIGH FLASH NAPHTHA	64742-95-6	100 PPM	25 PPM		2.7 68F	14
*AROMATIC POLYISOCYANATE PREPOLYMER	MIXTURE	.02 PPM@	.005 PPM@		1.4 77F	38
*METHYLAMYLKETONE	110-43-0	50 PPM				6

*Indicates toxic chemical(s) subject to the reporting requirements of Section 313 of Title III and of 40 CFR 372.

*,**,#,##,##*,#@,@@, BEHIND THE TLV & PEL VALUES INDICATE SPECIAL HEALTH AND FIRE HAZARD NOTATIONS TO BE FOUND IN THE BODY OF THE MSDS. READ ALL SECTIONS CAREFULLY AND CHECK FOR NOTATIONS.

SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

BOILING POINT: 280'F. SPECIFIC GRAVITY (H2O=1): 1.56
VAPOR DENSITY: HEAVIER THAN AIR EVAPORATION RATE: SLOWER THAN ETHER
COATING V.O.C.: 2.80 LB/GAL (336 G/L)
MATERIAL V.O.C.: 2.80 LB/GAL (336 G/L)
SOLUBILITY IN WATER: NOT SOLUBLE IN WATER
APPEARANCE AND ODOR: COLORED VISCOUS LIQUID WITH AROMATIC SOLVENT ODOR

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: 114 Deg F METHOD USED: TCC
FLAMMABLE LIMITS IN AIR BY VOLUME - LOWER: 0.5% UPPER: 6.0%

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

SPECIAL FIREFIGHTING PROCEDURES

WEAR SELF-CONTAINED BREATHING APPARATUS WITH A FULL FACE PIECE OPERATED IN PRESSURE-DEMAND OR OTHER POSITIVE PRESSURE MODE WHEN FIGHTING FIRES.

UNUSUAL FIRE AND EXPLOSION HAZARDS

VAPORS ARE HEAVIER THAN AIR AND MAY TRAVEL ALONG THE GROUND OR BE MOVED BY VENTILATION AND IGNITED BY HEAT, PILOT LIGHTS, OTHER FLAMES AND IGNITION SOURCES AT LOCATIONS DISTANT FROM MATERIAL HANDLING PORT.

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SECTION V - REACTIVITY DATA
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STABILITY: STABLE

CONDITIONS TO AVOID

NEVER USE WELDING OR CUTTING TORCH ON OR NEAR DRUMS(EVEN EMPTY) BECAUSE PRODUCT(EVEN JUST RESIDUE) CAN IGNITE EXPLOSIVELY.

INCOMPATIBILITY (MATERIALS TO AVOID)

AVOID CONTACT WITH STRONG OXIDIZING AGENTS.

HAZARDOUS DECOMPOSITION OR BYPRODUCTS

MAY FORM TOXIC MATERIALS; CARBON DIOXIDE AND CARBON MONOXIDE, VARIOUS HYDROCARBONS, ETC.

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

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SECTION VI - HEALTH HAZARD DATA
=====**INHALATION HEALTH RISKS AND SYMPTOMS OF EXPOSURE**

EXCESSIVE INHALATION OF VAPORS CAN CAUSE NASAL AND RESPIRATORY IRRITATION, DIZZINESS, FATIGUE, NAUSEA, HEADACHE, POSSIBLE UNCONCIOUSNESS, AND EVEN ASPHYXIATION.**AS NUISANCE DUSTS. #AS RESPIRABLE NUISANCE DUSTS.

SKIN AND EYE CONTACT HEALTH RISKS AND SYMPTOMS OF EXPOSURE

PROLONGED OR REPEATED CONTACT WITH PRODUCT CAN CAUSE MODERATE SKIN IRRITATION, DEFATTING, DERMATITIS. EYES: CAN CAUSE SEVERE IRRITATION, REDNESS, TEARING, BLURRED VISION.

SKIN ABSORPTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE

@SKIN ABSORPTION MAY POTENTIALLY CONTRIBUTE TO OVERALL EXPOSURE TO THIS MATERIAL. APPROPRIATE MEASURES SHOULD BE TAKEN TO PREVENT ABSORPTION SO THAT TLV IS NOT INVALIDATED.

INGESTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE

CAN CAUSE GASTROINTESTINAL IRRITATION, NAUSEA, VOMITTING, AND DIARRHEA. ASPIRATION OF MATERIAL INTO THE LUNGS CAN CAUSE CHEMICAL PNEUMONITIS, WHICH CAN BE FATAL.

HEALTH HAZARDS (ACUTE AND CHRONIC)

ACUTE: IRRITATION OF SKIN, EYES, MUCOUS MEMBRANES. DRYING, DEFATTING OF SKIN. AVOID INGESTION AND BREATHING OF VAPORS.

CHRONIC: EYE, LIVER, KIDNEY, AND CENTRAL NERVOUS SYSTEM DAMAGE MAY OCCUR.

CARCINOGENICITY: NTP? NO **IARC MONOGRAPHS?** NO **OSHA REGULATED?** NO

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE**EMERGENCY AND FIRST AID PROCEDURES**

SKIN: THOROUGHLY WASH EXPOSED AREA WITH SOAP AND WATER. REMOVE CONTAMINATED CLOTHING. LAUNDRER CLOTHING BEFORE REUSE.

EYES: FLUSH WITH LARGE AMOUNTS OF WATER, LIFTING UPPER AND LOWER LIDS OCCASIONALLY. GET MEDICAL ATTENTION.

INGESTION: DO NOT INDUCE VOMITTING. KEEP PERSON WARM, QUIET, AND GET MEDICAL ATTENTION. ASPIRATION OF MATERIAL INTO LUNGS DUE TO VOMITTING CAN CAUSE CHEMICAL PNEUMONITIS, WHICH CAN BE FATAL.

BREATHING: REMOVE PERSON TO FRESH AIR. GIVE OXYGEN IF BREATHING DIFFICULT; GIVE ARTIFICIAL RESPIRATION IF BREATHING STOPS. KEEP PERSON WARM AND GET MEDICAL ATTENTION.

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SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE
=====**STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED**

SMALL: ABSORB, PREFERRABLY WITH FLOOR ABSORBENT. TRANSFER TO HOOD.

LARGE: ELIMINATE ALL IGNITION SOURCES. WEAR PROTECTIVE CLOTHING. STOP SPILL, DIKE AREA, PUMP TO SALVAGE TANK. PREVENT RUN-OFF TO SEWERS, STREAMS. NOTIFY AUTHORITIES.

WASTE DISPOSAL METHOD

SMALL SPILL: ALLOW VOLATILE PORTION TO EVAPORATE IN HOOD. ALLOW SUFFICIENT TIME FOR VAPORS TO COMPLETELY CLEAR HOOD DUCT WORK. DISPOSE OF REMAINING MATERIAL IN ACCORDANCE WITH APPLICABLE REGULATIONS.

LARGE SPILL: DESTROY BY LIQUID INCINERATION. CONTAMINATED ABSORBENT MAY BE DEPOSITED IN A LANDFILL IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REGULATIONS.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING

DO NOT STORE OR USE IN HIGH TEMPERATURE AREAS OR NEAR HEAT, SPARKS, OR OPEN FLAME. KEEP CLOSURE TIGHT AND CONTAINER UPRIGHT TO PREVENT LEAKAGE. STORE ONLY IN WELL VENTILATED AREAS. AVOID CONTACT WITH OR BREATHING OF VAPORS RELEASED DURING CURING PROCESS.

OTHER PRECAUTIONS

DO NOT TAKE INTERNALLY. AVOID CONTACT WITH SKIN AND EYES. AVOID BREATHING OF VAPORS OR SPRAY MIST. ALL HAZARD PRECAUTIONS GIVEN IN THE DATA SHEET MUST BE OBSERVED.

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SECTION VIII - CONTROL MEASURES
=====**RESPIRATORY PROTECTION**

IF TLV OF THE PRODUCT OR ANY COMPONENT IS EXCEEDED, A NIOSH/MSHA JOINTLY APPROVED AIR SUPPLIED RESPIRATOR IS ADVISED IN ABSENCE OF PROPER ENVIRONMENTAL CONTROL. OSHA REGULATIONS ALSO PERMIT OTHER NIOSH/MSHA RESPIRATORS UNDER SPECIFIED CONDITIONS(SEE SAFETY EQUIPMENT SUPPLIER). ENGINEERING OR ADMINISTRATIVE CONTROLS SHOULD BE IMPLEMENTED TO REDUCE EXPOSURE.

VENTILATION

PROVIDE SUFFICIENT MECHANICAL (GENERAL AND/OR LOCAL EXHAUST) VENTILATION TO MAINTAIN EXPOSURE BELOW TLV (S).

PROTECTIVE GLOVES

WEAR RESISTANT GLOVES SUCH AS NITRILE RUBBER.

EYE PROTECTION

CHEMICAL SPLASH GOGGLES IN COMPLIANCE WITH OSHA REGULATIONS ARE ADVISED. CHECK TO SEE IF OTHERS ARE PERMITTED.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT

TO PREVENT REPEATED OR PROLONGED SKIN CONTACT, WEAR IMPERVIOUS CLOTHING AND BOOTS.

WORK/HYGIENIC PRACTICES

WASH HANDS BEFORE EATING, SMOKING, OR USING WASHROOM. SMOKE IN SMOKING PERMITTED AREAS ONLY.

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SECTION IX - TRANSPORTATION DATA
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PAINT, NON-REGULATED IF SHIPPED IN CONTAINERS LESS THAN 5 LITERS.

**IF SHIPPED IN LARGER CONTAINERS: UN-1263, PAINT 3, PG II
FLAMMABLE LIQUID**

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SECTION X - DISCLAIMER
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