

MATERIAL SAFETY DATA SHEET
For Coatings, Resins and Related Materials

03/28/2006

SECTION I - PRODUCT IDENTIFICATION

Manufacturer: Crawford Laboratories, Inc. 4165 South Emerald Avenue Chicago IL 60609	Information Phone: 773-376-7132 Emergency Phone: 800-424-9300
Product Class: POLYURETHANE Trade Name : MOISTURE CURE URETHANE Product Code : R0-029 C.A.S. Number: See Below	Hazard Ratings: Health - 3 none -> extreme Fire - 3 0 ---> 4 Reactivity - 0

SECTION II - HAZARDOUS INGREDIENTS

Ingredients	CAS #	Weight %	--- Exposure Limits ---	VP
			ACGIH/TLV OSHA/PEL	mm HG
* XYLENE	1330-20-7	20-50	100 ppm	21.
		S.T.E.L. = 150	150	

The above item contains approx. 15 % Ethylbenzene, CAS# 100-41-4
 The International Agency for Research on Cancer (IARC) has
 evaluated ethylbenzene and classified it as a possible human
 carcinogen (group 2B) based on sufficient evidence for carcinogly
 in experimental animals, but inadequate evidence for cancer in
 exposed humans.

PM ACETATE	108-65-6	1-5	Undetermined	4.
TOLUENE DIISOCYANATE	26471-62-5	< 1.	.01 ppm .02	0.

THE ABOVE AROMATIC ISOCYANATE CONSISTS OF:

* 80% 2,4 TOLUENE DIISOCYANATE CAS NO 584-84-9

* 20% 2,6 TOLUENE DIISOCYANATE CAS NO 91-08-7

The indicated TLV is 0.005 ppm ACGIH, 1983

In a National Toxicology Program (NTP) study, this material
 was carcinogenic when given orally to rats and mice at maximum
 tolerated doses. THIS MATERIAL WAS NOT CARCINOGENIC TO RATS IN
 A TWO YEAR INHALATION STUDY. Based on the results of the ORAL
 study, this material was included in the NTP annual report on
 Carcinogens.

* SECTION 313 SUPPLIER NOTIFICATION

This ingredient is subject to the reporting requirements
 of section 313 of the Emergency Planning and Community
 Right-To-Know Act of 1986 and of 40 CFR 372.

SECTION III - PHYSICAL DATA

Boiling Range: 243 - 484 Deg. F	Vapor Density: Heavier than Air.
Evap. Rate: 0.65 x n-Butyl Acetate	Liquid Density: Heavier than Water.
Volatiles volume: 44.5 %	Wgt per gallon: 8.42 Pounds.
Appearance: CLEAR LIQUID	

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SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Flammability Class: Flash Point: 78 F SETA LEL : 1.1 %

-EXTINGUISHING MEDIA:

FOAM, CO2, OR DRY CHEMICAL

-SPECIAL FIREFIGHTING PROCEDURES:

WATER MAY BE USED TO KEEP EXPOSED CONTAINERS COOL, AND TO KEEP FLAMMABLE STRUCTURES WET

DO NOT ENTER FIRE AREA WITHOUT PROPER PROTECTION BECAUSE HAZARDOUS DECOMPOSITION PRODUCTS MAY BE PRESENT. (SEE VI)

-UNUSUAL FIRE & EXPLOSION HAZARDS:

WATER PRESSURE MAY SPREAD A FLAMMABLE LIQUID FIRE.

SEALED CONTAINERS MAY EXPLODE IF OVERHEATED.

SECTION V - HEALTH HAZARD DATA

-PERMISSIBLE EXPOSURE LEVEL:

IF PEL'S ARE KNOWN, THEY ARE LISTED IN SECT. II
W A R N I N G CARE MUST BE TAKEN NOT TO EXCEED THE EXPOSURE
LIMIT FOR THE LOWEST TLV SHOWN IN SECTION II. WHEN IN DOUBT,
WEAR AN APPROVED RESPIRATOR AND ORDER AIR SAMPLING TESTS.
(SEE SECTION VIII)

-EFFECTS OF OVEREXPOSURE:

OVEREXPOSURE MAY PRODUCE VARIOUS EFFECTS, INCLUDING:

1-ACUTE TOXICITY, RESULTING IN HEADACHE, DIZZINESS, NAUSEA, AND
LOSS OF CONSCIOUSNESS.

2-SEVERE EYE IRRITATION POSSIBLY RESULTING IN PERMANENT DAMAGE.

3-IRRITATED MUCOUS MEMBRANES.

4-VOMITING DUE TO INGESTION.

5-DEFATTING AND DRYING OF THE SKIN.

6-SENSITIZATION AFTER REPEATED CONTACT.

OVEREXPOSURE TO AROMATIC ISOCYANATES WILL CAUSE IRRITATION TO
THE RESPIRATORY TRACT (DRY THROAT, COUGH, SHORTNESS OF BREATH,
CHEST TIGHTNESS) RESULTING IN SINUSITIS, BRONCHITIS AND
ASTHMA-LIKE SYMPTOMS.

-FIRST AID:

--EYE CONTACT-FLUSH WITH PLENTY OF CLEAN LUKEWARM LOW PRESSURE
WATER FOR 15 MIN., OCCASIONALLY LIFTING EYELIDS OPEN.
GET MEDICAL ATTENTION.

--INHALATION-REMOVE VICTIM TO FRESH AIR AND PROVIDE OXYGEN IF
BREATHING IS DIFFICULT. GIVE ARTIFICIAL RESPIRATION IF NOT
BREATHING. GET MEDICAL ATTENTION. KEEP VICTOM WARM AND
COMFORTABLE. NEVER GIVE AN UNCONSCIOUS PERSON LIQUIDS.

--INGESTION-IF SWALLOWED, CALL PHYSICIAN IMMEDIATELY. ONLY
INDUCE VOMITING ON INSTRUCTIONS OF PHYSICIAN. IF VOMITING
OCCURS SPONTANEOUSLY, KEEP HEAD BELOW HIPS TO PREVENT
ASPIRATION OF LIQUID INTO THE LUNGS. NEVER GIVE ANYTHING BY
MOUTH TO UNCONSCIOUS PERSON.

--SKIN CONTACT-FLUSH WITH WATER WHILE REMOVING CONTAMINATED
CLOTHING AND SHOES. FOLLOW BY WASHING WITH SOAP AND WATER.
DO NOT REUSE CONTAMINATED CLOTHING OR SHOES. IF IRRITATION
PERSISTS, GET MEDICAL ATTENTION.
(cont.)

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SECTION V - HEALTH HAZARD DATA (cont.)

-FIRST AID: (cont.)

SECTION VI - REACTIVITY DATA

STABILITY: ☐ Unstable ☒ Stable
HAZARDOUS POLYMERIZATION: ☐ May occur ☒ will not occur
-INCOMPATIBILITY:
MAY BE INCOMPATIBLE WITH OXIDIZING AGENTS AND STRONG ALKALIES.
-CONDITIONS TO AVOID:
AVOID HEAT, SPARKS, OPEN FLAMES, AND INCOMPATIBILITIES ABOVE
HIGH TEMPERATURE, STRONG OXIDIZING CONDITIONS, EXTENDED
CONTACT WITH AIR/OXYGEN.
WARNING: Do not spray-apply this material.
-HAZARDOUS DECOMPOSITION PRODUCTS:
INCOMPLETE COMBUSTION FOR PRODUCTS LIKE THIS MAY GENERATE
HIGHLY POISONOUS CARBON MONOXIDE AND OTHER TOXIC GASES.

SECTION VII - SPILL OR LEAK PROCEDURES

-STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED
WARNING - FLAMMABLE. ELIMINATE ALL IGNITION SOURCES.
HANDLING EQUIPMENT MUST BE GROUNDED TO PREVENT SPARKING.
SOAK UP WITH AN ABSORBENT AND PLACE IN NON-LEAKING
CONTAINERS. SEAL TIGHTLY FOR PROPER DISPOSAL.
-WASTE DISPOSAL METHOD:
DISPOSAL MUST BE IN ACCORDANCE WITH CURRENT LOCAL, STATE AND
FEDERAL REGULATION. CONTACT AN APPROVED DISPOSAL FACILITY.

SECTION VIII - SPECIAL PROTECTION INFORMATION:

-RESPIRATORY PROTECTION:
PROPERLY FITTED NIOSH/MSHA APPROVED RESPIRATORS SHALL BE USED
DURING APPLICATION UNLESS AIR MONITORING DEMONSTRATES VAPOR/MIST
LEVELS ARE BELOW APPLICABLE LIMITS.
BECAUSE THIS MATERIAL CONTAINS AROMATIC ISOCYANATES,
A POSITIVE PRESSURE SUPPLIED AIR OSHA/MSHA APPROVED
RESPIRATOR MUST BE WORN IF AIRBORN CONCENTRATIONS ARE UNKNOWN
OR IF THE AIRBORN CONCENTRATIONS EXCEED THE APPLICABLE LIMITS.
INDIVIDUALS HAVING A HISTORY OF RESPIRATORY ILLNESS OR
ASTHMATIC CONDITIONS SHOULD BE PRECLUDED FROM EXPOSURE.
WARNING: Do not spray-apply this material.
-VENTILATION:
EFFECTIVE ENGINEERING CONTROLS SHOULD BE USED WHENEVER POSSIBLE
-PROTECTIVE GLOVES:
USE RUBBER GLOVES
-EYE PROTECTION:
WEAR APPROVED SAFETY GOGGLES AND/OR FACE SHIELD.

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SECTION VIII - SPECIAL PROTECTION INFORMATION: (cont.)

-OTHER PROTECTIVE EQUIPMENT:

HAVE EYE BATH AND SAFETY SHOWER AVAILABLE.

SECTION IX - SPECIAL PRECAUTIONS

-PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:

TREAT AS A HAZARDOUS-FLAMMABLE MATERIAL.

KNOW APPLICABLE D.O.T REGULATIONS BEFORE ATTEMPTING TO
TRANSPORT THIS MATERIAL.

"WARNING: HOT ORGANIC CHEMICAL VAPORS OR MISTS ARE
SUSCEPTIBLE TO SUDDEN SPONTANEOUS COMBUSTION WHEN MIXED WITH
AIR. IGNITION MAY OCCUR AT TEMPERATURES BELOW THOSE PUBLISHED
IN THE LITERATURE AS "AUTOIGNITION" OR "IGNITION" TEMPERATURES.
IGNITION TEMPERATURES DECREASE WITH INCREASING VAPOR VOLUME AND
VAPOR/AIR CONTACT TIME AND ARE INFLUENCED BY PRESSURE CHANGES.

IGNITION MAY OCCUR AT TYPICAL ELEVATED TEMPERATURE PROCESS
CONDITIONS, ESPECIALLY IN PROCESS OPERATING UNDER VACUUM IF
SUBJECTED TO SUDDEN INGRESS OF AIR, OR OUTSIDE PROCESS
EQUIPMENT OPERATING UNDER ELEVATED PRESSURE IF SUDDEN ESCAPE OF
VAPORS OR MISTS TO THE ATMOSPHERE OCCURS. ANY PROPOSED USE OF
THIS PRODUCT IN ELEVATED TEMPERATURE PROCESSES SHOULD BE
THOROUGHLY EVALUATED TO ASSURE THAT SAFE OPERATING CONDITIONS
ARE ESTABLISHED AND MAINTAINED."

WARNING: Do not spray-apply this material.

-OTHER PRECAUTIONS:

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All information and opinions in this report are based on
experience and computer programming which we believe to be
reliable. We believe that the information contained herein is
current as of the date of this report. Since the use of this
information and of these opinions and the conditions of the use
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conditions of safe use of this product.

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