

For Coatings, Resins and Related Materials

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SECTION I - PRODUCT IDENTIFICATION

Manufacturer: Crawford Laboratories, Inc. Information Phone: 773-376-7132
4165 South Emerald Avenue Emergency Phone: 800-424-9300
Chicago, IL 60609

! Hazard Ratings: Health - 2
Product Class: PART A ! none -> extreme Fire - 2
Trade Name : FLOROSPARTIC PART A ! 0 ---> 4 Reactivity - 1
Product Code : R0-156 !
C.A.S. Number: SEE BELOW !

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SECTION II - HAZARDOUS INGREDIENTS

Table with 6 columns: Ingredients, CAS #, Weight %, Exposure Limits (ACGIH/TLV, OSHA/PEL), VP (mm HG). Row 1: ALIPHATIC POLYISOCYANATE, 28182-81-2, 20-50, 0.5 mg/M3.

S.T.E.L.= 1.0

The above item contains less then 0.2%

Hexamethylene-1,6-Diisocyanate, CAS #822-06-0

Which carries a time weighted average (TWA) of 0.005 PPM

Table with 6 columns: Ingredients, CAS #, Weight %, Exposure Limits (ACGIH/TLV, OSHA/PEL), VP (mm HG). Row 1: AROMATIC HYDROCARBON, 64742-95-6, 20-50, 50 ppm, 50, 9. Row 2: PCBTF, 98-56-6, 20-50, Undetermined.

CORPORATE EXPOSURE LIMIT FOR THIS ITEM IS 25 PPM 8 HR TWA

* SECTION 313 SUPPLIER NOTIFICATION

Ingredients with * above are subject to reporting requirements
of section 313 of the Emergency Planning and Community
Right-To-Know Act of 1986 and of 40 CFR 372.

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SECTION III - PHYSICAL DATA

Boiling Range: 282 - 446 Deg. F Vapor Density: Heavier than Air.
Evap. Rate: 0.11 x n-Butyl Acetate Liquid Density: Heavier than Water.
Volatiles volume: 60.5 % Wgt per gallon: 9.17 Pounds.
Appearance: CLEAR LIQUID

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SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Flammability Class: Flash Point: 108 F tcc LEL : 0.9 %

-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 COMBUSTIBLE LIQUID FIRE.
SEALED CONTAINERS MAY EXPLODE IF OVERHEATED.

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SECTION V - HEALTH HAZARD DATA

-PERMISSIBLE EXPOSURE LEVEL:

IF PEL'S ARE KNOWN, THEY ARE LISTED IN SECTION II

W A R N I N G : CARE MUST BE TAKEN TO ASSURE THAT THE
LOWEST OF THE EXPOSURE LIMITS SET FORTH IN SECTION II
IS NOT EXCEEDED. 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, WHICH MAY RESULT IN
IRRITATION AND DERMATITIS.

6-SENSITIZATION AFTER REPEATED CONTACT.

As a result of previous overexposures or a single large
dose, certain individuals may develop sensitization to
polyisocyanates (asthma-like symptoms) that may cause them to
react to a later exposure at levels well below the exposure
limit. These symptoms, which can include chest tightness,
wheezing, cough, shortness of breath or asthma attack, could be
delayed up to several hours after exposure. Extreme asthma
reactions can be life threatening. Once sensitized, an

individual can experience these symptoms upon exposure to dust,
cold air or other irritants. Sensitization can be permanent.
BREATHING HIGH CONCENTRATIONS MAY CAUSE CENTRAL NERVOUS SYSTEM
DEPRESSION AND LIVER CHANGES
PROLONGED INGESTION MAY CAUSE LIVER AND KIDNEY DAMAGE

-FIRST AID:

--EYE CONTACT-FLUSH WITH PLENTY OF FRESH WATER FOR 15 MINUTES
WHILE HOLDING 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 VICTIM WARM AND
COMFORTABLE. NEVER GIVE AN UNCONSCIOUS PERSON LIQUIDS.

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

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

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SECTION VI - REACTIVITY DATA

STABILITY: [] Unstable [x] Stable

HAZARDOUS POLYMERIZATION: [] May occur [x] Will not occur

-INCOMPATIBILITY:

MAY BE INCOMPATIBLE WITH STRONG OXIDIZING AGENTS AND STRONG
ALKALIES.

-CONDITIONS TO AVOID:

AVOID HEAT, SPARKS, OPEN FLAMES, AND INCOMPATIBILITIES ABOVE.
ALSO, AIRCRAFT TRANSPORT MUST BE IN STRICT ACCORDANCE WITH
APPLICABLE REGULATIONS.

Never spray this material. Never heat this material.

-HAZARDOUS DECOMPOSITION PRODUCTS:

INCOMPLETE COMBUSTION FOR PRODUCTS LIKE THIS MAY FORM HIGHLY
POISONOUS CARBON MONOXIDE AND OTHER TOXIC GASES.

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SECTION VII - SPILL OR LEAK PROCEDURES

-STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

WARNING - COMBUSTIBLE. ELIMINATE ALL IGNITION SOURCES.

HANDLING EQUIPMENT MUST BE GROUNDED TO PREVENT SPARKING.

WEARING THE PROTECTIVE CLOTHING OUTLINED IN SECTION VIII,

SOAK UP WITH AN ABSORBANT 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.

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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.

-VENTILATION:

EFFECTIVE ENGINEERING CONTROLS SHOULD BE USED WHENEVER POSSIBLE.

-PROTECTIVE GLOVES:

USE RUBBER GLOVES

-EYE PROTECTION:

WEAR APPROVED SAFETY GOGGLES

-OTHER PROTECTIVE EQUIPMENT:

HAVE EYE BATH AND SAFETY SHOWER AVAILABLE.

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SECTION IX - SPECIAL PRECAUTIONS

-PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:

TREAT AS ANY HAZARDOUS-COMBUSTIBLE MATERIAL; STORE IN A COOL,
DRY PLACE IN BUILDINGS DESIGNED FOR THE STORAGE OF COMBUSTIBLE
LIQUIDS.

WARNING: HOT ORGANIC CHEMICAL VAPORS OR MISTS ARE SUSCEPTIBLE
TO SUDDEN SPONTANEOUS COMBUSTION WHEN MIXED WITH AIR.

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 (cont.)

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SECTION IX - SPECIAL PRECAUTIONS (cont.)

-PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: (cont.)

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."

-OTHER PRECAUTIONS:

NOTE

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 of the product are not within the control of
Crawford Laboratories, Inc., it's the user's obligation to
determine the conditions of safe use of this product.
Crawford Laboratories, Inc., makes no warranty, expressed
or implied, as to the accuracy of the information and opinions,
and assumes no responsibility for any damage to person,
property or business arising from such use.