

===== Product Identification =====

Product ID:R8-060
MSDS Date:08/10/1992
FSC:8010
NIIN:00-935-7174
MSDS Number: BRNQN
=== Responsible Party ===
Company Name:CRAWFORD LABORATORIES, INCORPORATED
Address:4165 SOUTH EMERALD AVENUE
City:CHICAGO
State:IL
ZIP:60609
Country:US
Info Phone Num:312-376-7132
Emergency Phone Num:800-424-9300 (CHEMTREC)
Preparer's Name:DAVID SCHMETTERER
CAGE:DO165
=== Contra
ctor Identification ===
Company Name:CRAWFORD LABORATIES, INC
Address:4165 SOUTH EMERALD AVENUE
City:CHICAGO
State:IL
ZIP:60609
Phone:800-424-9300 CHEMTREC
CAGE:DO165
Company Name:CRAWFORD LABORATORIES, INC
Address:4165 SOUTH EMERALD AVENUE
Box:City:CHICAGO
State:IL
ZIP:60609
Country:US
Phone:312-376-7132
CAGE:5V430

===== Composition/Information on Ingredients =====

Ingred Name:NORMAL BUTYL ACETATE (VAPOR PRESSURE 13 MM HG)
CAS:123-86-4
RTECS #:AF7350000
Fraction by Wt: 20-50

%
Other REC Limits:NONE SPECIFIED
OSHA PEL:150 PPM
ACGIH TLV:150 PPM
EPA Rpt Qty:5000 LBS
DOT Rpt Qty:5000 LBS

Ingred Name:XYLENE (SARA 313) (VAPOR PRESSURE 25 MM HG)
CAS:1330-20-7
RTECS #:ZE2100000
Fraction by Wt: 1-5%
Other REC Limits:NONE SPECIFIED
OSHA PEL:100 PPM;STEL 150 PPM
ACGIH TLV:100 PPM;STEL 150 PPM
EPA Rpt Qty:1000 LBS
DOT Rpt Qty:1000 LBS

Ingred Name:C.I. PIGMENT BROWN 24
CAS:68186-90-3
Fraction by Wt: < 1%
Other REC Limits:NONE SPECIFIED
OSHA PEL:.5 MG/M3
ACGIH TLV:.5 MG/M3

Ingred Name:SILICON DIOXIDE
CAS:14808-60-7
RTECS #:VV7330000
Fraction by Wt: 1-5%
Other REC Limits:NONE SPECIFIED
OSHA PEL:SEE TABLE Z3
ACGIH TLV:0.1 MG/M3 RDUST;9293

Ingred Name:P-TOLUENE SULPONYL ISOCYANATE (PTSI)
CAS:4083-64-1
Fraction by Wt: < 1%
Other REC Limits:NONE SPECIFIED

Ingred Name:BENZOYL CHLORIDE (VAPOR PRESSURE 1 MM HG)
CAS:98-88-4
RTECS #:DM6600000
Fraction by Wt: < 1%
Other REC Limits:NONE SPECIFIED
EPA Rpt Qty:1000 LBS
DOT Rpt Qty:1000 LBS

Ingred Name:TRIMETHYLOLPROPANE (VAPOR

PRESSURE 1 MM HG)
CAS:77-99-6
Fraction by Wt: 1-5%
Other REC Limits:NONE SPECIFIED

Ingred Name:TOLUENE DIISOCYANATE 80% 2,4 ISOMER (CAS 584-84-9)
20% 2,6 ISOMER (CAS 91-08-7)
CAS:26471-62-5
RTECS #:NQ9490000
Fraction by Wt: < 1%
Other REC Limits:NONE SPECIFIED
OSHA PEL:.02 PPM
ACGIH TLV:.01 PPM
EPA Rpt Qty:100 LBS
DOT Rpt Qty:100 LBS

Ingred Name:URETHANE CATALYST
CAS:77-58-7
RTECS #:WH7000000
Fraction by Wt: < 1%
Other REC Limits:NONE SPECIFIED
ACGIH TLV:.1 MG/M3;STEL.2MG/M3

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===== Hazards Identification =====

Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO
Health Hazards Acute and Chronic:OVEREXPOSURE MAY PRODUCE VARIOUS
EFFECTS, INCLUDING, ACUTE TOXICITY, RESULTING IN HEADACHE,
DIZZINESS, NAUSEA, LOSS OF CONSCIOUSNESS. SEVERE EYE IRRITATION
POSSIBLY RESULTING IN PERMANENT DAMAGE. IRRITATED MUCOUS
MEMBRANES. VOMITING DUE TO INGESTION. DEFATTING & DRYING OF THE
SKIN. SENSITIZATION AFTER REPEATED CONTACT.

Explanation

tion of Carcinogenicity:THIS PRODUCT MAY CONTAIN TRACE AMOUNTS
OF SOME CHEMICALS KNOWN TO STATE OF CALIF TO BE CARCINOGENS OR
REPRODUCTIVE TOX.

Effects of Overexposure: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 Measures =====

First Aid:EYES: FLUSH WITH PLENTY OF C

LEAN LUKEWARM LOW PRESSURE WATER

FOR 15 MIN., OCCASIONALLY LIFTING EYELIDS. GET MED AID. INHALATION: REMOVE TO FRESH AIR & RESTORE BREATHING. GET MED AID. KEEP VICTIM WARM. NEVER GIVE AN UNCONSCIOUS PERSON LIQUIDS. INGESTION: CALL PHYSICIAN IMMEDIATELY. ONLY INDUCE VOMITING ON INSTRUCTION OF PHYSICIAN. IF VOMITING OCCURS SPONTANEOUSLY, KEEP HEAD BELOW HIPS, CONTINUED *

===== Fire Fighting Measures =====

Flash Point Method:SCC

Flash Poi

nt:92.0F,33.3C

Lower Limits:1.0 %

Extinguishing Media:FOAM, CO2, DRY CHEMICAL, FOG,

Fire Fighting Procedures:WATER USED TO KEEP EXPOSED CONTAINERS COOL, & TO KEEP FLAMMABLE STRUCTURES WET. DON'T ENTER FIRE AREA W/O ADEQUATE PROTECTION, HAZARDOUS DECOMP MAY BE PRESENT.

Unusual Fire/Explosion Hazard:WATER PRESSURE MAY SPREAD A FLAMMABLE LIQUID FIRE. SEALED CONTAINERS MAY EXPLODE IF OVERHEATED.

===== Accidental Release Measures =====

Spill Release Procedure

s:WARNING - FLAMMABLE. ELIMINATE ALL IGNITION

SOURCES. HANDLING EQUIPMENT MUST BE GROUNDED TO PRVENT SPARKING. SOAK UP WITH AN ABSORBENT & PLACE IN NON-LEAKING CONTAINERS. SEAL TIGHTLY FOR PROPER DISPOS AL.

===== Handling and Storage =====

Handling and Storage Precautions:TREAT AS A HAZARDOUS-FLAMMABLE MATERIAL. KNOW APPLICABLE D.O.T. REGULATIONS BEFORE ATTEMPTING TO TRANSPORT THIS MATERIAL.

Other Precautions:WARNING: HOT ORGANIC CHEMICAL VAPORS/MISTS ARE

SUSCEPTIBLE TO SUDDEN SPONTANEOUS COMBUSTION WHEN MIXED WITH AIR. IGNITION MAY OCCUR AT TEMPERATURES BELOW THOSE PUBLISHED IN THE LITERATURE AS "AUTOIGNIT ION" OR "IGNITION" TEMPERATURES.

===== Exposure Controls/Personal Protection =====

Respiratory Protection:IMPORTANT-MUST PROVIDE ADEQUATE VENTILATION TO MAINTAIN VAPOR CONCENTRATIONS BELOW THE ESTABLISHED TLV LIMIT AS GIVEN BY OSHA. IN MORE CONFINED AREAS A RESPIRATOR EQUIPED WITH ORG

ANIC VAPOR CARTRIDGE SHOULD BE WORN.

Ventilation:MUST PROVIDE ADEQUATE VENTILATION

Protective Gloves:USE RUBBER GLOVES

Eye Protection:WEAR SAFETY GOGGLES, &/OR FACE SHIELD

Other Protective Equipment:HAVE EYE BATH AND SAFETY SHOWER AVAILABLE

Supplemental Safety and Health

* INGESTION: ..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 & SHOES. FOLLOW B Y WASHING WITH SOAP & WATER. DO NOT REUSE CONTAMINATED CLOTHING OR SHOES. IF IRRITATION PERSISTS, GET MEDICAL ATTENTION.

===== Physical/Chemical Properties =====

HCC:F4

Boiling Pt:B.P. Text:124 TO 552F

Vapor Density:> AIR

Spec Gravity:1.08

Viscosity:75 CPS

Evaporation Rate & Reference:3.28 X N-BUTYL ACETATE

Solubility in Water:SLIGHT

Appearance and Odor:GRAY LIQUID, SOLVENT ODOR

Percent Volatiles by Volume:66.2

===== Stability and Reactivity Data =====

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Stability Indicator/Materials to Avoid:YES

MAY BE INCOMPATIBLE WITH OXIDIZING AGENTS & STRONG ALKALIES.

Stability Condition to Avoid:AVOID HEAT, SPARKS, OPEN FLAMES, & INCOMPATIBILITIES BELOW.

Hazardous Decomposition Products:INCOMPLETE COMBUSTION FOR PRODUCTS LIKE THIS MAY GENERATE HIGHLY POISONOUS CARBON MONOXIDE & OTHER TOXIC GASES.

Conditions to Avoid Polymerization:WARNING: DO NOT SPRAY-APPLY THIS MATERIAL.

===== Disposal Considerations =====

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Waste Disposal Methods:DISPOSAL MUST BE IN ACCORDANCE WITH CURRENT LOCAL, STATE & FEDERAL REGULATIONS. CONTACT AN APPROVED DISPOSAL FACILITY.

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