

ICI POLYURETHANES GROUP -- RUBINATE M (POLYMERIC MDI) -- 8040-00N019876

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Product Identification
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Product ID:RUBINATE M (POLYMERIC MDI)

MSDS Date:08/17/1990

FSC:8040

NIIN:00N019876

MSDS Number: BNVGP

=== Responsible Party ===

Company Name:ICI POLYURETHANES GROUP

Address:286 MANTUA GROVE RD

City:WEST DEPTFORD

State:NJ

ZIP:08066

Country:US

Info Phone Num:609-423-8300 OR 302-886-3000

Emergency Phone Num:800-327-8633;800-424-9300 (CHEMTREC)

CAGE:ICIPO

=== Contractor Identification ===

Company Name:ICI POLYURETHANES GROUP,RUBICON CHEM IS A DIV

Address:286 MANTUA GROVE ROAD

Box:City:WEST DEPTFORD

State:NJ

ZIP:08066

Country:US

Phone:302-866-3000

CAGE:ICIPO

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Composition/Information on Ingredients
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Ingred Name:ING 15:EXPOSURE I/A/W GOOD HYGIENE PRACTICE.

RTECS #:9999999ZZ

Ingred Name:WASTE DISP METH:I/A/W FEDERAL, STATE AND LOCAL REGULATIONS

RTECS #:9999999ZZ

Ingred Name:ISOCYANIC ACID, METHYLENEDI-P-PHENYLENE ESTER; (METHYLENE
BISPHENYL ISOCYANATE) (MDI) (SARA III)

CAS:101-68-8

RTECS #:NQ9350000

Fraction by Wt: 50%

OSHA PEL:0.02 PPM, C
ACGIH TLV:0.005 PPM
EPA Rpt Qty:1 LB
DOT Rpt Qty:1 LB

Ingred Name:POLYMETHYLENEPOLYPHENYL ISOCYANATE; (SIMILAR STRUCTURE OLIGOMERS)

CAS:9016-87-9
RTECS #:TR0350000
Fraction by Wt: 50%

Ingred Name:SUPP DATA:BE IMMED/DELAYED UP TO SEVERAL HRS AFTER EXPOS.CHRONIC EXPOS MAY RSLT IN PERM DECREASE IN LUNG FUNCTION(ING 4)

RTECS #:9999999ZZ

Ingred Name:ING 3:OR LUNG INJURY.IN STUDY OF RATS EXPSD AT 6MG/M3 THERE

WAS SIGNIFICANT INCIDENCE OF BENIGN TUMOR OF LUNG (ING 5)
RTECS #:9999999ZZ

Ingred Name:ING 4:(ADENOMA) & 1 MALIGNANT TUMOR (ADENOCARCINOMA). INCR INCIDENCE OF LUNG TUMORS IS ASSOC W/PRLNGD RESP IRRIT (ING 6)

RTECS #:9999999ZZ

Ingred Name:ING 5:& CONCURRENT ACCUMULATION OF YELLOW MATERIAL IN LUNG WHICH OCCURRED THROUGHOUT THE STUDY.

RTECS #:9999999ZZ

Ingred Name:FIRST AID PROC:IF NOT BRTHG, GIVE ARTF RESP, PREF MOUTH-TO-MOUTH. IF BRTHG LABORED, GIVE O*2. CALL MD.

RTECS #:9999999ZZ

Ingred Name:SPILL PROC:CARBONATE MAY BE SUBSTITUTED FOR AMMONIUM HYDROXIDE). TREAT SPILL AREA W/DECONTAM SOLN, USING ABOUT (ING 9)

RTECS #:9999999ZZ

Ingred Name:ING 8:10 PARTS OF SOLUTION FOR EACH PART OF SPILL & ALLOW IT TO REACT FOR AT LEAST 10 MINUTES. CARBON DIOXIDE (ING 10)

RTECS #:9999999ZZ

Ingred Name:ING 9:WILL BE EVOLVED, LEAVING INSOLUBLE POLYUREAS.

RTECS #:9999999ZZ

Ingrid Name: VENT:OR FILTERS TO REDUCE ENVIRONMENTAL CONTAMINATION.
RTECS #: 9999999ZZ

Ingrid Name: PROT CLTHG:HAVE EXCELLENT RESISTANCE TO PERMEATION BY MDI.
PROT CLOTHING SHOULD BE SELECTED & USED I/A/W (ING 13)
RTECS #: 9999999ZZ

Ingrid Name: ING 12:"GUIDELINES FOR THE SELECTION OF CHEM PROT
CLTHG"PUBLISHED BY ACGIH. EYEWASH STATION, SAFETY SHOWER IN WORK
AREA.
RTECS #: 9999999ZZ

Ingrid Name: OTHER PREC:SHOULD BE IDENTIFIED THROUGH BASELINE & ANNUAL
EVALUATION & REMOVED FROM FURTHER EXPOS. MED EXAM (ING 15)
RTECS #: 9999999ZZ

Ingrid Name: ING 14:SHOULD INCLUDE MEDICAL HISTORY, VITAL CAPACITY &
FORCED EXPIRATORY VOLUME AT ONE SECOND. MINIMIZE (ING 16)
RTECS #: 9999999ZZ

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

LD50 LC50 Mixture: LD50:(ORAL,RAT)>10,000 MG/KG.

Routes of Entry: Inhalation: YES Skin: NO Ingestion: YES

Reports of Carcinogenicity: NTP: NO IARC: NO OSHA: NO

Health Hazards Acute and Chronic: INGEST: IRRIT OF MOUTH, PHARYNX,
ESOPHAGUS & STOMACH. EYE: WILL IRRIT FOLLOWING CNTCT. SKIN: SENSIT
&/OR IRRIT MAY DEVELOP AFTER RPTD &/OR PRLNGD CNTCT. MDI IN CORN
OIL INJECTED INTRADERMALLY IN GUINEA P IGS CAN ELICIT A RESP
SENSIT

RXN. POTNTL FOR MDI TO INDUCE RESP SENSIT IN HUMANS & ANIMALS BY
INHAL IS (EFTS OF OVEREXP)

Explanation of Carcinogenicity: NOT RELEVANT

Effects of Overexposure: HLTH HAZ: WELL KNOWN; HOWEVER, NEW DATA
INDICATES THAT THIS EFT MAY BE INDUCED BY SKIN CNTCT. INHAL: VAPS &
AEROSOLS CAN IRRIT EYES, NOSE & RESP PASSAGES. SEVERE OVEREXPOS
MAY

LEAD TO PULM EDEMA. MDI CA N INDUCE RESP SENSIT W/ASTHMA-LIKE
SYMPS

SIMILAR TO THOSE INDUCED BY TDI(TOLUENE DIISOCYANATE). SYMPS
INCLUDE(SUPP DATA)

Medical Cond Aggravated by Exposure: INDIVIDUALS W/EXISTING RESPIRATORY

DISEASE, SUCH AS CHRONIC BRONCHITIS, EMPHYSEMA OR ASTHMA. SENSITIZED INDIVIDUALS SHOULD BE REMOVED FROM ANY FURTHER EXPOSURE.

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First Aid Measures
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First Aid:SKIN:WASH OFF W/PLENTY OF SOAP & WATER. IF REDNESS, ITCHING/BURNING SENSATION DEVELOPS, GET MD. EYE:IMMED FLUSH W/PLENTY OF WATER FOR AT LEAST 15 MIN. IF REDNESS, ITCHING/BURNING SENSATION DEVELOPS, HAVE EYES EXAMINED & TREATED BY MED PERS. INGEST:GIVE 1-2 GLASSES OF WATER TO DRINK. IF GI SYMPS DEVELOP, CALL MD. (NEVER GIVE ANYTHING BY MOUTH TO UNCON PERS.) INHAL: REMOVE TO FRESH AIR. (ING 7)

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Fire Fighting Measures
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Flash Point Method:COC
Flash Point:425F,218C
Extinguishing Media:DRY CHEMICAL, FOAM, CARBON DIOXIDE, HALOGENATED AGENTS. IF WATER USED, USE VERY LARGE QUANTITIES.
Fire Fighting Procedures:WEAR NIOSH/MSHA APPROVED SCBA & FULL PROTECTIVE EQUIPMENT . REACTION BETWEEN WATER & HOT ISOCYANATE MAY BE VIGOROUS.
Unusual Fire/Explosion Hazard:WATER CONTAMINATION WILL PRODUCE CARBON DIOXIDE. DO NOT RESEAL CONTAMINATED CONTAINERS AS PRESSURE BUILDUP MAY RUPTURE THEM.

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Accidental Release Measures
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Spill Release Procedures:WEAR PROT DURING CLEANUP. SOAK UP MATL W/ABSORB & SHOVEL INTO CHEM WASTE CNTNR. COVER CNTNR BUT DO NOT SEAL & REMOVE FROM WORK AREA. PREPARE DECONTAM SOLN OF 0.2-0.5% LIQ DETERGENT & 3-8% CONC AMMONIU M HYDROXIDE IN WATER (5-10% SODIUM (ING8)
Neutralizing Agent:NONE SPECIFIED BY MANUFACTURER.

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Handling and Storage
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Handling and Storage Precautions:STORE IN TIGHTLY SEALED CNTNRS TO PROTECT FROM ATMOSPHERIC MOISTURE. STORE IN COOL AREA. PVNT SKIN & EYE CNTCT. AVOID BRTHG VAPS/AEROSOLS.

Other Precautions:OBSERVE TLV LIMITATIONS. SENSITIZED INDIVIDUAL SHOULD

NOT BE EXPOSED TO PROD WHICH CAUSED SENSIT. INDIVIDUALS W/EXISTING RESP DISEASE SUCH AS CHRONIC BRONCH, EMPHYSEMA/ASTHMA SHOULD NOT BE EXPOSED TO ISOCYANATES. THESE INDIVIDUALS (ING 14)

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

Respiratory Protection:IF AIRBORNE CONCS EXCEED/EXPECTED TO EXCEED TLV,

USE NIOSH/MSHA APPRVD:POS PRESS SUPPLIED AIR RESP W/FULL FACEPIECE/AIR SUPPLIED HOOD. FOR EMER USE POS PRESS SCBA. AIR PURIFYING (CARTRIDGE TYPE) RESP NOT APPRVD FOR PROT AGAINST ISOCYANATES.

Ventilation:IF NEEDED, USE LOCAL EXHST VENT TO KEEP AIRBORNE CONCS BELOW TLV. EXHST AIR MAY NEED TO BE CLEANED BY SCRUBBERS (ING 11)

Protective Gloves:IMPERVIOUS GLOVES.

Eye Protection:CHEM WORK GOG & FULL LENGTH FSHLD.

Other Protective Equipment:APRON, ARM COVERS/FULL BODY SUIT. BUTYL RUBBER, NITRILE RUBBER, SARANEX COATED TYVEK & SOME NEOPRENE GARMENTS (ING 12)

Work Hygienic Practices:WORKERS SHOULD SHOWER & CHANGE TO FRESH CLOTHING AFTER EACH SHIFT. WASH CONTAMINATED CLOTHING BEFORE REWEARING.

Supplemental Safety and Health

VP:<0.0001 @ 20C. MATLS TO AVOID:RXN W/WATER VERY SLOW <50C BUT ACCELERATED AT HIGHER TEMPS & IN PRESENCE OF ALKALIES, TERTIARY AMINES & METAL CMPDS. SOME RXN CAN BE VIOLENT. CNDTNS(POLYM): EVOLUTION OF CO*2 GAS MAY RUPTURE CLOSED CNTNRS. EFTS OF OVERXP:CHRONIC COUGH, TIGHTNESS OF CHEST W/DFCLTY IN BRTHG & MAY (ING 3)

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

Boiling Pt:B.P. Text:646F,341C

Decomp Temp:Decomp Text:646F,341C

Vapor Pres:SUPP DATA

Vapor Density:8.6

Spec Gravity:1.2

Solubility in Water:REACTS

Appearance and Odor:DARK BROWN, VISCOUS LIQUID W/SLIGHT ODOR.

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

Stability Indicator/Materials to Avoid: YES

WILL REACT W/MATLS CONTAINING ACTIVE HYDROGENS, SUCH AS WATER, ALCOHOL,

AMMONIA, AMINES, ALKALIES & ACIDS. (SUPP DATA)

Stability Condition to Avoid: NONE SPECIFIED BY MANUFACTURER.

Hazardous Decomposition Products: COMBUSTION PRODUCTS: CO*2, CO, NO*X, NH*3. TRACE AMOUNTS OF HCN.

Conditions to Avoid Polymerization: HIGH TEMPS IN PRESENCE OF ALKALIES, TERTIARY AMINES & METAL CMPDS WILL ACCELERATE POLYMERIZATION. POSSIBLE (SUPP DATA)

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

Waste Disposal Methods: SLOWLY STIR ISOCYANATE WASTE INTO DECONTAM SOLN USING 10 PARTS OF SOLN FOR EACH PART OF ISOCYANATE. LET STAND FOR 48 HRS, ALLOWING EVOLVED CO*2 TO VENT AWAY. NEUT WASTE. NEITHER SOLID/LIQ PORTION HAZ WASTE UNDER RCRA, 40CFR261. DISPOSE OF (ING 17)

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