

SILPAK, INC.

470 EAST BONITA AVE. POMONA, CA 91767
(909) 625-0056 Fax (909) 625-0082 WWW.SILPAK.COM

GENERIC RU-400 A/B SERIES MATERIAL SAFETY DATA SHEET

SECTION I

EMERGENCY TELEPHONE #: 909-625-0056, 800-262-8200

CHEMICAL NAME AND SYNONYMS: ISOCYANATE PREPOLYMER

TRADE NAME AND SYNONYMS: RU-420 A, RU-421 HS A, RU-425 A, RU-430 A, RU-440 A, RU-438 A, RU-455 A, RU-448 A, RU-470 A, RU-480 A, RU-485 A, RU-490 A, RU-450 A, RUX-410 A, RU-550, RU491 A, RU435TH-A

CHEMICAL FAMILY: ISOCYANATE

SECTION II HAZARDOUS INGREDIENTS

TOLUENE DIISOCYANATE (TDI). CAS #26471-62-5: > 1%

POLYETHER POLYOL MIXTURE CAS #25322-69-4: < 99%

PROPRIETARY MIXTURE

SECTION III PHYSICAL DATA

BOILING POINT (F): NOT DETERMINED

SPECIFIC GRAVITY: 1.00

VAPOR PRESSURE (mm Hg): 20C < 0.1

PERCENT VOLATILE BY VOLUME (%): 0

EVAPORATION RATE: Nil

SOLUBILITY IN WATER: Reacts Slowly

APPEARANCE AND ODOR: Clear syrup, slight sweet acrid odor

SECTION IV

FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (METHOD USED): 270F TOC

FLAMMABLE LIMITS: N/A

EXTINGUISHING MEDIA: Foam, Water fog, CO2

SPECIAL FIRE FIGHTING PROCEDURES: Personnel must be protected against vapors and combustion products, wear self-contained breathing apparatus.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Avoid water contamination in closed containers or confined areas as CO2 gas is generated as Part A reacts with water.

SECTION V HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE: For TSDI, OSHA P.E.L.: 0.02 ppm ceiling.

EFFECTS OF OVEREXPOSURE: Respiratory, eye and skin irritation. TDI has been found to cause cancer in certain laboratory animals after prolonged feeding test.

EMERGENCY AND FIRST AID PROCEDURES: RESPIRATORY: Remove from area. Treat symptomatically. **Eye:** Flush immediately with water for at least 15 minutes, and call a physician. **Skin:** Remove with alcohol, wash with soap and water.

CHRONIC EFFECTS : Repeated overexposure to TDI may cause respiratory and dermal sensitization.

TDI is listed as a carcinogen by IARC(2B) and NTP. TDI has been shown to cause cancer in lab animals when administered Orally. Carcinogenicity via inhalation (most likely means of industrial exposure) has not been proven.

SECTION VI REACTIVITY DATA

STABILITY: Stable

INCOMPATIBILITY (MATERIALS TO AVOID):

HAZARDOUS DECOMPOSITION PRODUCTS: Basic compounds (such as lye and amines) and water.

HAZARDOUS POLYMERIZATION: Will not occur

CONDITIONS TO AVOID: None

SECTION VII SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Soak up on absorbent material; wash down and neutralize with household ammonia, clean up with soap and water.

WASTE DISPOSAL METHOD: Landfill neutralized material per local regulations.

SECTION VIII SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION (SPECIFY TYPE): Recommended in confined area or if material is sprayed or heated.

VENTILATION: Local exhaust - recommended

OTHER: A respirator should be equipped with Organic Vapor Cartridges.

PROTECTIVE GLOVES: Recommended

EYE PROTECTION: Recommended

OTHER PROTECTIVE EQUIPMENT: A respirator should be equipped with Organic Vapor Cartridges.

SECTION IX SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: KEEP CONTAINER TIGHTLY CLOSED. AVOID WATER CONTAMINATION. STORE AT NORMAL ROOM TEMPERATURE.

HMIS : Health : 1 , Flammability : 1 , Reactivity : 0 , Protective Equipment : C

Transportation : none Hazardous

V.O.C. Content : N/A

California Prop 65 : Listed (Toluene Diisocyanate) Less than 2%

Known to cause cancer .

Sara 313 : Listed (T.D.I). CAS # 26471-62-5 Less Than 2%

OTHER PRECAUTIONS: NONE KNOWN

MATERIAL SAFETY DATA SHEET
"B" COMPONENT

SECTION I

MANUFACTURER: SILPAK, INC.

ADDRESS: 470 EAST BONITA AVE. POMONA, CA 91767

(909) 625-0082, 24 hrs 1-800-262-8200

CHEMICAL NAME AND SYNONYMS: POLYOL MIXTURE

TRADE NAME AND SYNONYMS: RU-420 B, RU-421 HS B, RU-425 B, RU-430 B, RU-440 B, RU-438 B, RU-455 B, RU-448B, RU-470B, RU-480 B, RU-485 B, RU-490 B, RU-450 B, RUX-410 B, RU-550 B, RU491 B, RU435TH-B

CHEMICAL FAMILY: POLYOL, TRADE SECRET

SECTION II HAZARDOUS INGREDIENTS

POLYETHER POLYOL MIXTURE CAS # 25322-69-4 <100%

PROPRIETARY AROMATIC AMINE MIXTURE – no exposure limits have been established

By OSHA or ACGIH for ingredients contained.

SECTION III PHYSICAL DATA

BOILING POINT (F): N/A **SPECIFIC GRAVITY:** 1.00

VAPOR PRESSURE (mm Hg.) @ 77F: Nil.

PERCENT VOLATILE @ 77F by volume (%): Nil

SOLUBILITY IN WATER: Low

VAPOR DENSITY (AIR=): < 0.1 mmHg @ 25C

EVAPORATION RATE: N/A

APPEARANCE & ODOR: Green to Amber translucent liquid, mild odor

SECTION IV

FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (METHOD USED): 350F (OPEN CUP)

FLAMMABLE LIMITS: NOT MEASURED

EXTINGUISHING MEDIA: FOAM, DRY CHEMICAL OR CARBON DIOXIDE & WATER FOG

SPECIAL FIRE FIGHTING PROCEDURES: Wear self-contained breathing apparatus.

UNUSUAL FIRE AND EXPLOSION HAZARDS: NONE

SECTION V HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE: N/A

EFFECTS OF OVEREXPOSURE: Skin and Eye irritation.

EMERGENCY AND FIRST AID PROCEDURE: EYES: Immediately flush with water for at least 15 minutes; see a Physician. Skin: Remove with alcohol or water- less hand cleaner then soap and water. Ingestion: Give milk or egg white until vomit is clear.

CHRONIS EFFECTS : A C hemical in this product has been linked to pancreas , liver, thyroid and eye effects
In lab rats in a two year feeding.

SECTION VI REACTIVITY DATA

STABILITY: STABLE

HAZARDOUS DECOMPOSITION PRODUCTS: None

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

INCOMPATIBILITY: None

SECTION VII
SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Soak up on absorbent material; wash with soap and water.

WASTE DISPOSAL METHOD: Per local regulations.

SECTION VIII
SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION (SPECIFY TYPE): Only needed if material is sprayed

VENTILATION: Local Exhaust Recommended

PROTECTIVE GLOVES: Recommended

EYE PROTECTION: Recommended

OTHER PROTECTIVE EQUIPMENT: NONE REQUIRED

SECTION IX SPECIAL PRECAUTION

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: Keep container tightly closed. Store at normal room temperature.

HMIS : Health : 1 , Flammability : 1 , Reactivity : 0 , Protective Equipment : C

Transportation : Non- Hazardous

V.O.C. Content : N/A

California Prop 65 : Not Listed

Known to cause cancer .

Sara 313 : Not Listed

PREPARED BY: PHILIP J. GALARNEAU 1-03-2005