



MATERIAL SAFETY DATA SHEET

System Three Resins, Inc.

3500 W. Valley Hwy N; Suite 105

Auburn, Washington 98001

SECTION I - PRODUCT IDENTIFICATION

Product Name: **SA-2100 PUR Adhesive/Sealant Part A**

MSDS Number: 2100A

Product Type: Isocyanate Prepolymer

24-Hr. Emergency Phone:

CHEMTREC: 1-800-424-9300

Date of Prep: March 6, 2012

Information: 253-333-8118

Prepared By: J. Bartlett

Hazard Ratings:

Health 2*

Fire 1

Reactivity 0

SECTION II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

<u>INGREDIENT</u>	<u>WT%</u>	<u>CAS NUMBER</u>	<u>OSHA PEL</u>	<u>ACGIH TLV</u>
Polyurethane prepolymer	60-80%	N/A (mixture)	none established	none established
Dicyclohexylmethane 4,4'-diisocyanate	20-30%	5124-30-1	none established	0.005 ppm TWA

SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

Melting Point: Not established

Vapor Pressure @ 25°C: 0.000015 mm Hg

Evaporation Rate: Slower than Ether

Appearance and Odor: Translucent thick liquid with little or no odor.

Specific Gravity: 1.03

Material V.O.C.: None

Water Solubility: Negligible

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Flash Point: 392°F Method: Pensky-Martens Closed Cup

Flammable Limits in Air By Volume: Lower: none established Upper: none established

Extinguishing Media: Foam, Carbon Dioxide, Dry Chemical, Water Fog

Special Firefighting Procedures: When fighting chemical fires wear full protective equipment with self-contained breathing apparatus. Water spray may be used to cool fire-exposed containers. Toxic fumes may be evolved when this substance is burned.

SECTION V - REACTIVITY DATA

Stability: Stable.

Incompatibility(Materials to avoid): Water, amines, strong bases, alcohols, copper alloys.

Hazardous Polymerization: Will not occur.

Hazardous Decomposition Products: Oxides of carbon, oxides of nitrogen, hydrogen cyanide, isocyanate, isocyanic acid, gases, vapors.

Conditions to Avoid: Contact with moisture, temperatures above 350°F(177°C).

SECTION VI - HEALTH HAZARD DATA

ROUTE(S) OF ENTRY: Inhalation, Skin Contact, Eye Contact, Ingestion

EFFECTS OF OVEREXPOSURE:

ACUTE:

INHALATION: May cause allergic respiratory reaction. Diisocyanate vapors at concentrations above the exposure limits can irritate the mucous membrane. This includes runny nose, sore throat, coughing, chest discomfort, shortness of breath and reduced lung function. These effects are usually reversible.

SKIN CONTACT: Causes skin irritation and may cause allergic skin reaction.

EYE CONTACT: Causes irritation with symptoms including redness, pain, and tearing.

INGESTION: Gastrointestinal irritation. Symptoms may include abdominal pain, upset stomach, nausea, vomiting, and diarrhea.

CHRONIC:

HMDI is a strong sensitizer. Prolonged or repeated contact can cause sensitization. Once sensitized, an individual may react to direct skin contact or even to airborne levels below the TLV with reddening, swelling, rash, and in severe cases blistering and hives. Sensitized individuals may also experience asthma-like symptoms and even pulmonary edema. Effects are usually reversible.

FIRST AID MEASURES:

Eyes: Flush with water for 15 minutes holding eyelids open. Seek medical attention.

Skin: Remove contaminated clothing and shoes and wipe excess off skin. Flush skin with water. Follow by washing in soap and water. If irritation occurs, seek medical attention. Do not reuse clothing until cleaned. Contaminated leather articles (shoes) cannot be decontaminated and should be destroyed.

Inhalation: Remove victim to fresh air and provide oxygen if breathing is difficult. Give artificial respiration if not breathing. Get medical attention.

Ingestion: Do not induce vomiting. Give victim two glasses of water. Never give anything by mouth to an unconscious person. If irritation persists, get medical attention.

Medical Conditions Generally Aggravated by Exposure: Other than skin sensitization which appears to be permanent, this product does not appear to cause long term health effects. Nor, does it appear to aggravate other medical conditions.

SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE

If Material is Spilled: Avoid contact with material. Persons not wearing appropriate protective equipment should leave the area of the spill until cleanup is complete. Stop spill at source, dike area to prevent spreading, pump liquid to salvage tank or drum. Remaining liquid may be taken up on clay, diatomaceous earth, sawdust, or other absorbent, and shoveled into disposal containers.

Waste Disposal Method: Waste is not hazardous by RCRA criteria (40 CFR 261). Place in an appropriate disposal facility in compliance with local regulations.

SECTION VIII - SPECIAL PROTECTION INFORMATION

Respiratory Protection: In the absence of proper environmental control NIOSH approved respiratory protection is required. For emergencies, a self-contained breathing apparatus or full-faced respirator is recommended.

Ventilation: Provide adequate ventilation in work areas. Confine material in sealed containers when not in use.

Hand Protection: Always wear impervious gloves, neoprene, vinyl or rubber to keep material off skin.

Eye Protection: Splash proof goggles or safety spectacles with side shields are recommended. Always wear eye protection when handling this product.

Other Protective Equipment: Wear clean, body-covering clothing to avoid skin contact.

SECTION IX - TRANSPORTATION REQUIREMENTS

Not regulated by DOT, IATA or IMO.

Other Requirements:

This product contains no toxic chemicals subject to the report requirements of Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 (EPCRA) and of 40 CFR 372.

The information contained herein is based on the data available to us and is believed to be correct. However, System Three Resins, Inc. makes no warranty, expressed or implied, regarding the accuracy of these data or the results to be obtained from the use thereof. System Three assumes no responsibility for injury from the use of the product described herein.



MATERIAL SAFETY DATA SHEET

System Three Resins, Inc.

3500 W. Valley Hwy N; Suite 105

Auburn, Washington 98001

SECTION I - PRODUCT IDENTIFICATION

Product Name: **SA-2100 PUR Adhesive/Sealant Part B**

MSDS Number: 2100B

Product Type: Polyol Mixture

24-Hr. Emergency Phone:

CHEMTREC: 1-800-424-9300

Date of Prep: March 6, 2012

Information: 253-333-8118

Prepared By: J. Bartlett

Hazard Ratings:

Health 2

Fire 1

Reactivity 0

SECTION II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

<u>INGREDIENT</u>	<u>WT%</u>	<u>CAS NUMBER</u>	<u>OSHA PEL</u>	<u>ACGIH TLV</u>
Polyether Polyol	70-80%	N/A (mixture)	none established	none established

SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling Point: >400°F

Vapor Density: Heavier than Air

Evaporation Rate: Slower than Ether

Appearance and Odor: White thick liquid with little to no odor.

Specific Gravity: 1.1

Material V.O.C.: None

Water Solubility: Negligible

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Flash Point: > 300°F

Flammable Limits in Air By Volume - Lower: N/A Upper: N/A

Extinguishing Media: Foam, Carbon Dioxide, Dry Chemical, Water Fog

Method: Tag Closed Cup

Special Firefighting Procedures: When fighting chemical fires wear full protective equipment with self-contained breathing apparatus. Water spray may be used to cool fire-exposed containers. Toxic fumes may be evolved when this substance is burned.

SECTION V - REACTIVITY DATA

Stability: Stable.

Incompatibility: Strong oxidizing agents, Lewis and mineral acids.

Hazardous Polymerization: Will not occur.

Hazardous Decomposition Products: Oxides of carbon and nitrogen, aldehydes, acids

Conditions to Avoid: Storage with materials to avoid.

SECTION VI - HEALTH HAZARD DATA

EFFECTS OF OVEREXPOSURE:

Acute: Slightly irritating to skin, moderately irritating to eyes.

Chronic: May cause skin sensitization from prolonged and repeated contact.

Carcinogenicity: None known.

EMERGENCY AND FIRST AID PROCEDURES:

Eyes: Flush thoroughly with water for at least 15 minutes. Get immediate medical attention.

Skin: Remove contaminated clothing and flood area with water. Wash affected skin with soap and water. Wash clothing before reuse. Discard shoes. Get medical attention if redness, soreness, or blistering occur or persist.

Inhalation: Remove to fresh air. Administer oxygen if necessary. Get medical attention if breathing is difficult or cough develops.

Ingestion: DO NOT INDUCE VOMITING. Vomiting will cause further damage to throat or respiratory tract. Dilute by giving water or milk to drink if victim is conscious. GET IMMEDIATE MEDICAL ATTENTION.

Medical Conditions Generally Aggravated by Exposure: None known.

SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE

If Material is Spilled: Avoid contact with material. Persons not wearing appropriate protective equipment should leave the area of the spill until cleanup is complete. Stop spill at source, dike area to prevent spreading, pump liquid to salvage tank or drum. Remaining liquid may be taken up on clay, diatomaceous earth, sawdust, or other absorbent, and shoveled into disposal containers.

Waste Disposal Method: Waste is not hazardous by RCRA criteria (40 CFR 261). Place in an appropriate disposal facility in compliance with local regulations.

SECTION VIII - SPECIAL PROTECTION INFORMATION

Respiratory Protection: Normally none is required when adequate ventilation is provided. In the absence of proper environmental control NIOSH approved respiratory is required. For emergencies, a self-contained breathing apparatus or full-faced respirator is recommended.

Ventilation: Provide adequate ventilation in work areas. Confine material in sealed containers when not in use.

Hand Protection: Always wear impervious gloves, neoprene, vinyl or rubber.

Eye Protection: Splash proof goggles or safety spectacles with side shields are recommended. Always wear eye protection when sanding cured epoxy resins to avoid dust in eyes.

Other Protective Equipment: Wear clean, body-covering clothing to avoid skin contact.

SECTION IX - TRANSPORTATION REQUIREMENTS

Not regulated by DOT, IATA, or IMO

SARA Title III:

This product contains no toxic chemicals subject to the report requirements of Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 (EPCRA) and of 40 CFR 372.