



# MATERIAL SAFETY DATA SHEET

System Three Resins, Inc. 3500 W. Valley Hwy N; Suite 105 Auburn, Washington 98001

## SECTION I - PRODUCT IDENTIFICATION

Product Name: **Mirrorcoat® PART A**  
MSDS Number: 0050A  
Date of Prep: April 12, 2011  
24-Hr. Emergency Phone:

Product Type: Epoxy Resin Mixture  
Information: 253-333-8118  
Prepared By: J. Bartlett  
**CHEMTREC: 1-800-424-9300**

**Hazard Ratings: D2B**  
**Health 2**  
**Fire 1**  
**Reactivity 0**

## SECTION II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

HAZARDOUS COMPONENTS	AMOUNT	CAS NUMBER	OSHA PEL	ACGIH TLV
Diglycidyl Ether of Bisphenol A (DGEBA)	70-80%	25068-38-6	none established	none established
Alkylglycidyl Ether	20-3 0%	17557-23-2	none established	none established

## SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling Range: not applicable  
Vapor Density: Heavier than Air  
Evaporation Rate: Slower than Ether  
Appearance and Odor: Thick liquid with little or 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 Method: Pensky-Martens Closed Cup  
Flammable Limits in Air By Volume - Lower: N/A Upper: N/A  
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. Hazardous Polymerization: Will not occur.  
Incompatibility: Strong oxidizing agents, Lewis and mineral acids.

Hazardous Decomposition Products: Oxides of carbon, aldehydes, acids

Conditions to Avoid: Epoxy resins and epoxy resin hardeners react with each other producing heat. They should not be mixed with each other under uncontrolled conditions or in large mass as the ensuing exotherm may result in heat and smoke resulting in hazardous decomposition products.

## SECTION VI - HEALTH HAZARD DATA

### EFFECTS OF OVEREXPOSURE:

Acute: Slightly irritating to skin, moderately irritating to eyes. Odor may irritate nose, throat and respiratory tract of some persons.

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

Carcinogenicity: Early studies with DGEBA have been negative. The IARC concluded in 1988 that DGEBA was not classifiable as a carcinogen.

### EMERGENCY AND FIRST AID PROCEDURES:

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

## MirrorCoat® Part A(Cont.)

**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 give liquids if victim is unconscious or very drowsy. Otherwise, give no more than 2 glasses of water and induce vomiting by giving 2 tablespoons syrup of ipecac (1 tablespoon and 1 glass of water for child). If ipecac is unavailable, give 2 glasses of water and induce vomiting by touching finger to back of throat. Keep head below hips while vomiting. Get medical attention.

**Medical Conditions Generally Aggravated by Exposure:** Other than skin sensitization which appears to be permanent, epoxy resin 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:** 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 & OTHER REQUIREMENTS

**Transportation of Dangerous Goods Classification:** Not regulated

**Consumer warnings:** N/A

All components in this product are listed on the TSCA.

Canada NSNR: All components in this product are on the Domestic Substances List.

U.S. Department of Transportation Classification: Not regulated

**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 and of 40 CFR 372.

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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: **MirrorCoat® PART B**  
MSDS Number: 0050B  
Date of Prep: April 12, 2011  
24-Hr. Emergency Phone:

Product Type: Polyamine Mixture  
Information: 253-333-8118  
Prepared By: J. Bartlett  
**CHEMTREC: 1-800-424-9300**

**Hazard Ratings: D2B,E**  
**Health 3**  
**Fire 1**  
**Reactivity 0**

## SECTION II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

### HAZARDOUS COMPONENTS

HAZARDOUS COMPONENTS	AMOUNT	CAS NUMBER	OSHA PEL	ACGIH TLV	
Modified Aliphatic Amines (Mixture is trade secret)	50-70%	-----	none	established	none established
Nonyl Phenol	30-5	0%	25154-52-3	none established	none established

## SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling Range: N/A                      Specific Gravity: 0.97  
Vapor Density: Heavier than Air                      Material V.O.C.: None  
Evaporation Rate: Slower than Ether                      Water Solubility: Negligible  
Appearance and Odor: Light amber liquid with ammonia-like odor.

## SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Flash Point: > 250F°    Method: Pensky-Martins Closed Cup  
Flammable Limits in Air By Volume:    Lower: N/A                      Upper: N/A  
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 will be evolved when this substance is burned.

## SECTION V - REACTIVITY DATA

Stability: Stable

Conditions to Avoid: Epoxy resins and epoxy resin hardeners react with each other producing heat. They should not be mixed with each other under uncontrolled conditions or in large mass as the ensuing exotherm may result in heat and smoke.

Incompatibility: Strong oxidizing agents, mineral acids.

Hazardous Decomposition Products: Oxides of carbon, nitrogen

Hazardous Polymerization: Will not occur.

## SECTION VI - HEALTH HAZARD DATA

### EFFECTS OF OVEREXPOSURE:

Acute: May cause burns to skin and eyes. High vapor concentration can cause severe irritation of eyes and respiratory tract. Liquid causes severe damage to mucous membranes if swallowed.

Chronic: Prolonged and repeated skin contact may cause skin sensitization, asthma or other allergic responses.

Carcinogenicity: Results of in vitro mutagenicity tests on ethylene amines have been negative. It is not expected that any of the ingredients are carcinogenic.

## MirrorCoat PART B (Cont.)

### 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:** This material may be a strong skin sensitizer in certain susceptible persons. Once sensitized, most persons are unable to work around amine cured epoxy resins without an allergic reaction. Sensitized persons are not known to have other health problems as a result of sensitization.

### 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 & OTHER REQUIREMENTS

**U.S. Department of Transportation Classification:**

1 gallon or less: ORM-D

Greater than 1 gallon: AMINES, LIQUID, CORROSIVE, N.O.S., (ETHYLENE AMINE), 8, UN2735, PG III

All components in this product are listed on the TSCA.

**Canadian T.D.G. Classification:** (Same as USDOT Greater than 1 gallon)

**Consumer Warnings:** DANGER! Corrosive.

**Canada NSNR:** All components in this product are on the Domestic Substances List.

**US EPA 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 and of 40 CFR 372.

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