



## MATERIAL SAFETY DATA SHEET

### SECTION 1 - Material Identification

Product Name	MSC Part B, Curing Agent
Product Code	MSC-B
Manufacturer	Sound Specialty Coatings Corp. P.O. Box 13160 Burton, WA 98013
Telephone Number	206-517-2611
Emergency Telephone Number	206-517-2611
Date Perpared	6/10/99

### EMERGENCY OVERVIEW

HMIS Health Rating	3	Flammability	1	Reactivity	0
Physical Form	Mobil Liquid				
Color	Yellow				
Odor	Amine				
Hazards	Harmful if swallowed. Corrosive to eyes. Corrosive to skin. Severe eye irritant. Severe respiratory tract irritant. Severe skin irritant. May cause skin sensitization.				
Extinguishing Media	Ignition will give rise to a Class B fire. In case of large fire use: Alcohol Foam, Water Spray. In case of small fire use: Carbon Dioxide (CO <sub>2</sub> ), Dry Chemical, Dry sand				
C.A.S. Chemical Name	Mixture				
Synonyms	None				
Chemical Family	Cycloaliphatic Amine				
Empirical Formula	Mixture				
Intended Use	Curing Agent, Epoxy				

## SECTION 2 - Ingredients

#	%	CAS Number and Chemical Name
1.	<36.00	2855-13-2 Isophoronediamine (IPD)
2.	<30.00	100-51-6 Benzyl Alcohol

The remaining components are trade secret.

OSHA (ACGIH) Exposure Limits  
Not Established.

## SECTION 3 - Health Hazards

Routes of Exposure

Eye Contact, Skin Contact, Ingestion, Skin Absorption.

Exposure Standards

No standards established for the product. Maintain air contaminant concentrations in the workplace at the lowest feasible levels.

Health Hazards

Harmful if swallowed. Corrosive to eyes. Corrosive to skin. Severe eye irritant. Severe respiratory tract irritant. Severe skin irritant. May cause skin sensitization.

Target Organs

Eye, Skin, Respiratory system.

Signs and Symptoms of Exposure (Acute effects)

Product vapor in low concentrations can cause lacrimation, conjunctivitis and corneal edema when absorbed into the tissue of the eye from the atmosphere. Corneal edema may give rise to a perception of 'blue haze' or 'fog' around lights. The effect is transient and has no known residual effect. Burns of the eye may cause blindness. Contact with the skin may cause dryness (defatting), itching and/or rash. Inhalation of vapors may cause irritation in the respiratory tract. Contact of undiluted product with the eyes or skin quickly causes severe irritation and pain and may cause burns, necrosis and permanent injury. Ingestion may cause death unless treated promptly. Inhalation of aerosols and mists may severely damage contacted tissue and produce scarring. Product is absorbed through the skin and may cause nausea, headache and general discomfort.

### Signs and Symptoms of Exposure (Possible Longer Term Effects)

Repeated and/or prolonged exposure may cause allergic reaction/sensitization. Repeated and/or prolonged exposures may result in: adverse respiratory effects (such as cough, tightness of chest or shortness of breath), adverse eye effects (such as conjunctivitis or corneal damage), adverse skin effects (such as defatting, rash, or irritation), adverse skin effects (such as rash, irritation or corrosion). Dryness of nasal passages may be experienced when material is inhaled over a long period of time.

### Medical Conditions Generally Aggravated by Exposure

Asthma, Chronic respiratory disease (e.g. Bronchitis, Emphysema), Eye disease, Skin disorders and Allergies.

### Carcinogens Under OSHA, ACGIH, NTP, IARC, Other

This product contains no carcinogens in concentrations of 0.1 percent or greater.

## SECTION 4 - First Aid

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### Eye Contact

Hold eyelids apart and immediately flush eyes with plenty of water for at least 15 minutes. Seek medical advice.

### Skin Contact

Remove product and immediately flush affected area with water for at least 15 minutes. Remove contaminated clothing and shoes. Destroy contaminated leather apparel. Cover the affected area with a sterile dressing or clean sheeting and transport for medical care. **DO NOT APPLY GREASES OR OINTMENTS.** Control shock, if present. Launder contaminated clothing prior to reuse.

### Inhalation

Move patient to fresh air. If breathing has stopped or is labored give assisted respiration (e.g. mouth-to-mouth). Prevent aspiration of vomit. Turn victim's head to the side. Seek medical advice.

### Ingestion

In the event of ingestion, administer 3-4 glasses of milk or water. **DO NOT INDUCE VOMITING.** Seek medical advice.

## SECTION 5 - Fire and Explosion Data

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Flash Point (closed cup)	110.00 C	(230.00 F)
Upper Explosion Limit (UEL)	No Data	
Lower Explosion Limit (LEL)	No Data	
Autoignition Temperature	No Data	

Fire Hazard Classification (OSHA/NFPA)  
Class IIIB

### Extinguishing Media

Ignition will give rise to a Class B fire. In case of a large fire use: Water Spray, Alcohol Foam. In case of small fire use: Carbon Dioxide (CO<sub>2</sub>), Dry Chemical, Dry sand or limestone.

### Special Fire Fighting Procedures

A face shield should be worn. Firefighters should wear butyl rubber boots, gloves, and body suit and a self-contained breathing apparatus. Retain expended liquids from fire fighting for later disposal.

### Unusual Fire and Explosion Hazards

May generate toxic or irritating combustion products. Contact of liquid with skin must be prevented. May generate carbon monoxide gas. May generate toxic nitrogen oxide gases. May generate ammonia gas. Personnel in vicinity and downwind should be evacuated.

## SECTION 6 - Accidental Release Measures

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### Containment Techniques (Removal of ignition sources, diking, etc.)

Stop the leak, if possible. Reduce vapor spreading with a water spray. Shut off or remove all ignition sources. Construct a dike to prevent spreading.

### Clean-Up Procedures

If recovery is not feasible, admix with dry soil, sand or non-reactive absorbent and place in a container or dumpster pending disposal. Transfer to containers by suction, preparatory for later disposal. Flush area with water spray. Clean-up personnel must be equipped with self contained breathing apparatus and butyl rubber protective clothing. For large spills, recover spilled materials with a vacuum truck.

### Other Emergency Advice

Wear protective clothing, boots, gloves, and eye protection.

## SECTION 7 - Handling and Storage

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### Storage

Keep away from: acids, alkalis, oxidizers. Keep in cool, dry, ventilated storage and in closed containers. Store in steel containers preferably located outdoors, above ground, and surrounded by dikes to contain spills or leaks. Do not store in iron or other reactive metal containers.

### Handling

Avoid contact with skin or eyes. Avoid breathing of vapors. Handle in well ventilated work space. When handling, do not eat, drink, or smoke.

### Other Precautions

Emergency showers and eye wash stations should be readily accessible. Adhere to work practice rules established by government regulations (e.g. OSHA).

## SECTION 8 - Personal Protection/Exposure Controls

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### Eye Protection

Full face shield with goggles underneath.

### Hand Protection

Neoprene rubber gloves. Impermeable gloves. Cuffed butyl rubber gloves. Nitrile rubber gloves.

### Respiratory Protection

Not required under normal conditions in a well-ventilated workplace.

### Protective Clothing

Impervious clothing. Slicker suit. Rubber boots. Full rubber suit (rain gear). Butyl or Latex protective clothing.

### Engineering Controls

No specific controls needed.

### Work and Hygienic Practices

Provide readily accessible eye wash stations and safety showers. Wash at the end of each workshift and before eating, smoking or using the toilet. Promptly remove clothing that becomes contaminated leather articles.

## SECTION 9 - Typical Physical and Chemical Properties

Physical Form	Mobile liquid
Color	Yellow
Odor	Amine
pH	Alkaline
Vapor Pressure (mm Hg at 21C (70F))	2.00
Vapor Density (Air = 1)	No Data
Boiling Point	204.44 C (399.99F)
Melting Point	No Data
Solubility in Water	Slight (0.1 - 1%)
Specific Gravity (Water = 1)	1.02
Molecular Weight	Mixture

## SECTION 10 - Stability and Reactivity

### Chemical Stability

Stable

### Conditions to Avoid (if unstable)

Not applicable

### Incompatibility (Materials to avoid)

Mineral acids (i.e. sulfuric, phosphoric, etc.). Alkalis (i.e. Sodium or Potassium Hydroxide etc.). Organic acids (i.e. acetic acid, citric acid, etc.). Reducing agents (i.e. hydrides, sulfites, etc.). Oxidizing agents (i.e. perchlorates, nitrates, etc.). Reactive metals (i.e. sodium, calcium, zinc, etc.). Sodium or Calcium Hypochlorite. Product slowly corrodes copper, aluminum, zinc and galvanized surfaces. Amines. Reaction with peroxides may result in violent decomposition of peroxide possibly creating an explosion. Materials reactive with hydroxyl compounds. A reaction accompanied by large heat release occurs when the product is mixed with acids. Heat generated may be sufficient to cause vigorous boiling creating a hazard due to splashing or splattering of hot material.

### Hazardous Decomposition Products (from burning, heating, or reaction with other materials).

Carbon Monoxide in a fire. Carbon Dioxide in a fire. Ammonia when heated. Nitrogen Oxides in a fire. Irritating and toxic fumes at elevated temperatures. Nitric acid in a fire. Aldehydes. Organic acid vapors. Nitrogen oxide can react with water vapors to form corrosive nitric acid (TLV=2 ppm).

## Hazardous Polymerization

Will not occur.

## Conditions to Avoid (if polymerization may occur)

Not applicable

## SECTION 11 - Toxicological Properties

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### Acute Oral Toxicity (LD50, RAT)

1000.00 mg/kg (Estimate)

### Acute Dermal Toxicity (LD50, Rabbit)

>2800.00 mg/kg (Estimate)

### Acute Inhalation Toxicity (LC50, RAT)

No Data

### Miscellaneous Toxicity Data

Toxicity data from similar products.

### Other Acute Effects

No Data

### Irritation Effects Data

Irritation data from similar products.

### Chronic/Subchronic Data

No delayed, subchronic or chronic test data are known.

## SECTION 12 - Ecological Information

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### Ecotoxicity

No Data

### Environmental Fate

2855-13-2 Isophoronediamine; Biodegradable.

### Additional Information

No Data

**SECTION 13 - Disposal Considerations**

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Waste Disposal

Comply with all Federal, State and Local Regulations.

**SECTION 14 - Transport Information**

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DOT Non-Bulk Shipping Name

Amines, liquid, corrosive, n.o.s. (Isophoronediamine / Alkylphenol) // 8 // UN2735 // PG III

DOT Bulk Shipping Name

Refer to Bill of Lading.

IMO Shipping Data

Refer to Bill of Lading.

ICAO/IATA Shipping Data

Amines, liquid, corrosive, n.o.s. (Isophoronediamine / Alkylphenol) // 8 // UN2735 // III // Shipment per 49 CFR 171.11.

**SECTION 15 - Regulatory Information**

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US Federal Regulations

Toxic Substances Control Act (TSCA)-

All components are included in the EPA Toxic Substances Control Act (TSCA) Chemical Substances Inventory.

OSHA Hazard Communication Standard (29CFR1910.1200) hazard class(es)  
Corrosive. Sensitizer.

EPA SARA Title III Section 312 (40CFR370) hazard class Immediate Health Hazard. Delayed Health Hazard.

EPA SARA Title III Section 313 (40CFR372) toxic chemicals above “de minimis” level are           None

State Regulations

Proposition 65 Substances (component(s) known to the State of California to cause cancer and/or reproductive toxicity and subject to warning and discharge requirements under the “Safe Drinking Water and Toxic Enforcement Act of 1986”)

None



## SECTION 16 - International Regulations

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Canada

DSL

Included on Inventory

WHMIS Hazard Classification

Class D Division 2B, Class E Corrosive.

WHMIS Trade Secret Registry Number(s)

None

WHMIS Symbols

Test tube/hand, Stylized T.

European Economic Community (EEC)

EINECS Master Inventory

Included on Inventory.

EEC Symbol

Corrosive (C)

EEC Risk (R) Phrases

May cause sensitization by skin contact (R43). Causes burns (R34). Harmful by inhalation, in contact with skin and if swallowed (R20/21/22).

EEC Safety Phrases

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice (S26). Wear suitable protective clothing, gloves and eye/face protection (S36/37/39). In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible) (S45).