

**MATERIAL SAFETY DATA SHEET****SECTION 1 - MATERIAL IDENTIFICATION**

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PRODUCT NAME	RUST-PRIME
PRODUCT CODE	R-PRIME
MANUFACTURER	SOUND SPECIALTY COATINGS CORP.
TELEPHONE NUMBER	(206) 517-2611
EMERGENCY TELEPHONE NUMBER	(206) 517-2611
DATE PREPARED	JULY 1999

**EMERGENCY OVERVIEW**

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HMIS HEALTH RATING	3	FLAMMABILITY	1	REACTIVITY	1
PHYSICAL FORM	LIQUID				
COLOR	AMBER				
ODOR	AMMONIACAL				
HAZARDS	Harmful if in contact with skin. Corrosive to eyes. Corrosive to skin. Severe eye irritant. Severe respiratory tract irritant. Severe skin irritant. May cause skin sensitization.				
EXTINGUISHING MEDIA fire limestone.	Ignition will give rise to a Class B fire. In case of large use: alcohol foam, water spray. In case of small fire use: carbon dioxide(CO <sub>2</sub> ), dry chemical, dry sand or				
C.A.S. CHEMICAL NAME	Mixture				
SYNONYMS	None				

CHEMICAL FAMILY Modified Amidoamine

EMPIRICAL FORMULA Mixture

INTENDED USE No Data

## **SECTION 2 - INGREDIENTS**

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#	%	CAS Number and Chemical Name
1.	<40.00	123-00-2 4-aminopropylmorpholine
2.	<2.00	112-57-2 TETRAETHYLENEPENTAMINE (TEPA)

The remaining components are trade secret.

### **OSHA (ACGIH) EXPOSURE LIMITS**

N/E = Not Established.

## **SECTION 3 - HEALTH HAZARDS**

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### **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 in contact with skin.

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. 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. Inhalation of aerosols and mists may severely damage contacted tissue and produce scarring. Product is absorbed through the skin and may cause malaise, discomfort, injury and death unless treated promptly.

#### 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 or chest or shortness of breath), adverse eye effects (such as conjunctivitis or corneal damage), adverse skin effects (such as rash, irritation or corrosion).

#### 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) >100.00 C (>212.00 F)

UPPER EXPLOSION LIMIT (UEL) No Data

LOWER EXPLOSION LIMIT (UEL) 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 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 firefighting for later disposal.

### **UNUSUAL FIRE AND EXPLOSION HAZARDS**

May generate toxic or irritating combustion products. Contact of liquid with skin must be prevented. Sudden reaction and fire may result if product is mixed with an oxidizing agent. 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)**

Shut off or remove all ignition sources. Stop the leak, if possible. Reduce vapor spreading with a water spray. Construct a dike to prevent spreading (includes molten liquids until they freeze).

### **CLEAN-UP PROCEDURES**

If recovery is not feasible, admix with dry soil, sand or non-reactive absorbent and place in an appropriate chemical waste container. 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 material with a vacuum truck.

### **OTHER EMERGENCY ADVICE**

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

## **SECTION 7 - HANDLING AND STORAGE**

### **STORAGE**

Keep away from: acids, oxidizers. Keep in cool, dry, ventilated storage and in closed containers.

Store under inert atmosphere. Store under a nitrogen atmosphere. Do not store in reactive metal containers.

### **HANDLING**

Avoid contact with skin or eyes. Avoid breathing of vapors. Handle in well ventilated work space. Handle under inert gas atmosphere in dry equipment. 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). Do not use sodium nitrite or other nitrosating agents in formulations containing this product. Cancer-causing nitrosamines could be formed.

## **SECTION 8 - PERSONAL PROTECTION / EXPOSURE CONTROLS**

### **EYE PROTECTION**

Full face shield with goggles underneath.

### **HAND PROTECTION**

Neoprene rubber gloves. Impermeable gloves. Polyvinyl chloride 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. Discard contaminated leather articles. Launder or discard contaminated

## **SECTION 9 - TYPICAL PHYSICAL AND CHEMICAL PROPERTIES**

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PHYSICAL FORM	Liquid
COLOR	Amber
ODOR	Ammoniacal
pH	Alkaline
VAPOR PRESSURE (mm Hg at 21C (70F))	1.30
VAPOR DENSITY (Air = 1)	No Data
BOILING POINT	>200.00 C (>392.00 F)
MELTING POINT	No Data
SPECIFIC GRAVITY (Water = 1)	0.97
MOLECULAR WEIGHT	Mixture

## **SECTION 10 - STABILITY AND REACTIVITY**

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### **CHEMICAL STABILITY**

Material is stable under a nitrogen blanket.

### **CONDITIONS TO AVOID (if unstable)**

Moisture. Exposure to light and air.

### **INCOMPATIBILITY (Materials to avoid)**

Mineral acids (i.e. sulfuric, phosphoric, etc.). Organic acids (i.e. acetic acid, citric acid etc.). Oxidizing Agents (i.e. perchlorates, nitrates etc.). Reactive metals (i.e. sodium, calcium, zinc etc.). Sodium or Calcium Hypochlorite. CAUTION! N-Nitrosamines, many of which are known to be potent carcinogens may be formed when the product comes in contact with nitrous acid, nitrites or atmosphere with high nitrous oxide concentrations. Product slowly corrodes copper, aluminum, zinc and galvanized surfaces. Reaction with peroxides may result in violent decomposition of peroxide possibly creating an explosion. Materials reactive with hydroxyl compounds. Nitrites, nitrosating agents. 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. Nitrosamines. Aldehydes. 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)

>3560.00 mg/kg (Estimate)

ACUTE DERMAL TOXICITY (LD50, RABBIT)

>1230.00 mg/kg (Estimate)

ACUTE INHALATION TOXICITY (LC50, RAT)

No Data

Data available on components only.

OTHER ACUTE EFFECTS

No Data

IRRITATION EFFECTS DATA

Severe irritant to the skin or a rabbit. 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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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.  
(Amidoamine) // 8 //UN2735 // PG II

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.  
(Amidoamine) // 8 //UN2735 // II //  
Shipment per 49 CFR 171.11

## **SECTION 15 - REGULATORY INFORMATION**

US FEDERAL REGULATIONS

TOXIC SUBSTANCES CONTROL ACT (TSCA)-

All components are included in the EPA Toxic Substances Control Act (TSCA) Chemical Substance 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**

#### CANADA

##### DSL

Not on inventory. Notifications have been submitted to Environment Canada.

#### WHMIS HAZARD CLASSIFICATION

Class D Division 2B, Class E Corrosive

#### WHMIS SYMBOLS

Test tube/hand, Stylized T

#### EUROPEAN ECONOMIC COMMUNITY (EEC)

##### EINECS/ELINCS MASTER INVENTORY

Polymeric substance; monomers included on inventory.

#### EEC SYMBOL

Corrosive (C)

#### EEC RISK (R) PHRASES

May cause sensitization by skin contact (R43). Causes burns (R34). Harmful in contact with  
skin (R21).

#### 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).

#### AUSTRALIA

AICS            Not on inventory.