



MATERIAL SAFETY DATA SHEET

System Three Resins, Inc.

3500 W. Valley Hwy N; Suite 105

Auburn, Washington 98001

SECTION I - PRODUCT IDENTIFICATION

Product Name: **STR9103 Hardener Part B**

MSDS Number: 2043B34

Date of Prep: December 12, 2002

Product Type: Amine Mixture

24-Hr. Emergency Phone:

Information: 253-333-8118

Prepared By: J. Bartlett

CHEMTREC: 1-800-424-9300

Hazard Ratings:

Health 3

Fire 1

Reactivity 0

SECTION II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

COMPONENT	WT%	CAS NUMBER	OSHA PEL	ACGIH TLV
Modified Aliphatic Amines (Mixture is trade secret)	80-90%	-----	none established	none established
Nonyl Phenol	10-20%	25154-52-3	none established	none established

SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling Range: N/A

Vapor Density: Heavier than Air

Evaporation Rate: Slower than Ether

Appearance and Odor: Thin, straw-colored liquid with ammonia-like odor.

Specific Gravity: 1.1

Material V.O.C.: None

Water Solubility: Negligible

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.

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: 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 – OTHER REQUIREMENTS

Department of Transportation Classification:

One gallon or less: ORM-D

One gallon or more: Amines, Liquid, Corrosive, N.O.S., (Ethylene Amine), 8; UN2735; PG III

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.

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.