



MATERIAL SAFETY DATA SHEET

Prepared in accordance with ISO 11014-1/ ANSI standard
Z400.1-2004

Revision Date: 12/20/2010

MSDS No.: ND4079

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: 923 Epoxy Adhesive Resin Part - A

Synonyms: NB143P53F

Use of the Substance/Preparation: Adhesive

Supplier:

ND Industries, Inc.
1893 Barrett Road
Troy, Michigan 48084
Tel: (248) 288-0000
Fax: 248) 288-0022

Emergency Telephone Number: 24 hr. EMERGENCY CHEMTREC
1-800-424-9300

2. HAZARDS IDENTIFICATION

**EMERGENCY OVERVIEW-
WARNING:**

Causes skin and eye irritation. May cause sensitization by skin contact. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Principle Routes of Exposure:

Skin and eyes

POTENTIAL HEALTH EFFECTS:

Eye Contact:

Causes eye irritation.

Skin Contact:

Causes skin irritation. May cause sensitization by skin contact.

Ingestion:

Not expected to be a route of entry under normal industrial use conditions. May cause gastrointestinal irritation.

Carcinogenic Effects:

None known.

Target Organ Effects:

None known.

**Medical Conditions Aggravated by
Exposure:**

Asthma, skin disorders and allergies, and eye diseases.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS Number	EINECS Number	Weight %	EU Classification
Epoxy resin	25068-38-6	500-033-5	30-40	Xi, N: R36/38; R43; R51/53
Epoxy Resin	28064-14-4	500-108-2	30-40	Xi: R36/38; R43
Epoxy Resin	Mixture	n/a	25-35	Xi, N: R36/38; R43; R51/53

Amorphous Silica	67762-90-7	n/a	1-3	None
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4. FIRST AID MEASURES

Skin Contact: Remove contaminated clothing. Wash affected area with plenty of soap and water for at least 15 minutes. If irritation develops or persists seek medical attention. Launder contaminated clothing before reuse.

Eye Contact: Flush eyes with water for at least 20-30 minutes, occasionally lifting eyelids. Remove contact lenses, and continue rinsing. If irritation develops or persists, seek medical attention.

Inhalation: Remove to fresh air. Seek medical attention.

Ingestion: Do not induce vomiting. If vomiting occurs spontaneously, prevent aspiration into lungs. Seek medical attention.

5. FIRE AND IGNITION INFORMATION

Flash Point >392°F

Explosion Limits in Air – Upper (%): Not established.

Explosion Limits in Air – Lower (%): Not established.

OSHA Flammability Classification: Combustible.

Auto-ignition Temperature: Not established.

Extinguishing Media: Use media suitable for surrounding fire.

Special Protective Equipment for Firefighters: Fire fighters should wear full turnout gear, including self contained breathing apparatus.

Hazardous Decomposition and/or Combustion Products: May generate ammonia, nitrogen oxides and oxides of carbon.

Risk of Dust Explosion: Not applicable.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Only trained personnel should clean a spill. Ventilate spill area. Wear suitable protective equipment and clothing.

Methods for Cleaning Up: Soak up spilled material using inert absorbent. Place collected material in suitable container for disposal.

Environmental Precautions: Do not allow this product to enter soils, watercourses, drains or sewers.

7. HANDLING AND STORAGE

Handling: Work in a well ventilated area. Avoid contact with skin and eyes. Wear suitable personal protective equipment. Do not breathe vapors. Wash hands after using and before eating, drinking, smoking or using the lavatory.

Storage: Store in a cool, dry, well ventilated location. Keep containers tightly closed when not in use. Do not store near open flames or other ignition sources.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE LIMITS

Exposure limits for those components with limits are stated below.

Amorphous Silica, The regulatory exposure limits are found under the general silica, CAS RN 7631-86-9:

US OSHA PEL: 6 mg/m³ TWA
 US ACGIH – TLV: 3 mg/m³ TWA (respirable)

PEL: Permissible Exposure Limit

STEL: Short Term Exposure Limit

TLV: Threshold Limit Value

TWA: Time Weighted Average

US ACGIH: United States American Conference of Governmental Industrial Hygienists

US OSHA: United States Occupational Safety and Health Administration

ENGINEERING CONTROLS Work in a well ventilated area.

PERSONAL PROTECTIVE EQUIPMENT

Respiratory Protection: Wear NIOSH approved respiratory protection if engineering controls are not adequate to maintain exposures below specified limits, or if risk assessment indicates respiratory protection is necessary.

Hand Protection: Wear chemical impervious gloves.

Eye Protection: Wear chemical resistant goggles.

Skin and Body Protection: Wear chemical impervious clothing to avoid skin contact.

Other: Eyewash and safety showers should be readily available in the immediate work area for emergency use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	White to yellow liquid
Odor:	Characteristic
pH	Not established.
Vapor Pressure:	Not established.
Boiling Point/Range:	Not established.
Melting Point/Range:	Not established.
Water Solubility:	Negligible.
Density:	Not established.
Specific Gravity:	Not established.
% Volatile (by Volume):	Not established.
Evaporation Rate:	Not established.
Viscosity:	Not established.

10. STABILITY AND REACTIVITY

Stability:	Stable.
Hazardous Polymerization:	Will not occur.
Mechanical Sensitivity (shock):	Not applicable.
Conditions to Avoid:	Avoid oxidizing agents, organic acids, mineral acids, sodium hypochlorite, and reactive metals. Reaction with peroxides may result in violent decomposition of peroxide possibly creating an explosion.
Hazardous Decomposition and/or Combustion Products:	Phenolics, nitrogen oxides, oxides of carbon, and possibly other toxic fumes.

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY

Product Name: Epoxy Adhesive Resin Part – A Product Code: 923 Revision Date: 12/20/2010

Oral LD50: No data on product itself.
Inhalation LC50: No data on product itself.
Dermal LC50: No data on product itself.
Eye Irritation: No data on product itself.

CHRONIC TOXICITY

Carcinogenic Effects: No data on product itself.
Mutagenic Effects: No data on product itself.
Reproductive Toxicity: No data on product itself.
Sensitizing Effects: May cause sensitization by skin contact.

12. ECOLOGICAL INFORMATION

Information given is based on data on the components and the toxicology of similar products.

Aquatic Toxicity: Do not allow product to reach ground water, water course, or sewage system.
Danger to drinking water if even small quantities leak into the ground.
Also poisonous for fish and plankton in water bodies.
Toxic for aquatic organisms

ENVIRONMENTAL FATE

Mobility: No data on product itself.
Bioaccumulation: No data on product itself.
Persistence / Degradability: No data on product itself.
Distribution to Environmental Compartments: No data on product itself.

13. DISPOSAL CONSIDERATIONS

Disclaimer: Information in this section pertains to the product as shipped in its intended composition as described in Section 2 of this MSDS. Contamination or processing may change waste characteristics and requirements. Regulations may also apply to empty containers, liners or rinsate. State/provincial and local regulations may be different from federal regulations.

RCRA (40 CFR 261): Dispose of in accordance with all applicable waste regulations.

14. TRANSPORTATION INFORMATION

DOT:

Shipping Name: Environmentally Hazardous Substance, Liquid, N.O.S. (reaction product: bisphenol-A-(epichlorohydrin) epoxy resin (number average molecular weight \leq 700), Epichlorohydrin formaldehyde-phenol polymer; epoxy resin (number average molecular weight \leq 550), Bisphenol F epoxy resin)

Hazard Class: 9

Identification Number: UN3082

Packing Group: III

Marine Pollutant: Yes

15. REGULATORY INFORMATION

Hazard Classification

United States – OSHA (29 CFR 1910.1200): This product is considered hazardous under OSHA.

International Inventories

All components of this product are listed on or exempt from the following inventories:

- (yes) - European Inventory of Existing Commercial Substances (EINECS)
- (yes) - United States Toxic Substances Control Act (TSCA) Inventory

U.S. Federal Regulations

TSCA 12(b) Export Notification: Not required

Clean Air Act amendments of 1990 (CAA, Section 11240: CFR 82): None

Clean Water Act (CWA, 40 CFR 116): None

Comprehensive Environmental Response, Compensation and Liability Act (CERCLA, 40 CFR 302): None

Superfund Amendments and Reauthorization Act, Title III (SARA):

SARA Section 302 (40 CFR 355) Extremely Hazardous Substances: None

SARA Section 313 (40 CFR 372) Toxics Release Inventory: None

U.S. State Regulations

California Proposition 65: None

16. OTHER INFORMATION

HMIS Rating

HMIS Index: *- chronic, 0 – Minimal, 1 – slight, 2- moderate, 3 – serious, 4 –severe

Health: *2

Flammability: 1

Physical Hazard: 0

Additional Contacts:

Prepared by: ND Industries, Inc. – Safety, Health and Environmental Affairs
Revision Date: 12/20/2010
Previous Revision Date: n/a
Reasons for Revision: n/a

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