Material Safety Data Sheet

1. Chemical Product and Company Identification

DESCRIPTION: ELMER'S SUPERFAST EPOXY CEMENT RESIN PHASE

PRODUCT TYPE: EPOXY RESIN COUMPOUND

APPLICATION: E1009 PART1, 61009 PART1

· Manufacturer/Supplier Information

MSDS Prepared by:

Elmer's Products, Inc.
1 Easton Oval
Columbus, OH 43219

Emergency Phone Number
Poison Control Center
1-888-516-2502

For additional health, safety or regulatory information, call 1-888-435-6377.

Call 1-800-848-9400 to place an order or request additional MSDSs.

2. Composition, Information on Ingredients

The ingredients listed below have been associated with one or more immediate and/or delayed(*) health hazards. Risk of damage and effects depends upon duration and level of exposure. BEFORE USING, HANDLING, OR EXPOSURE TO THESE INGREDIENTS, READ AND UNDERSTAND THE MSDS.

% by weight

25068-38-6 *4,4'-Isopropylidenediphenol-Epichlorohydrin Copolymer 100

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3. Hazards Identification

3.1 Emergency Overview

Appearance	Transparent viscous liquid
Odor	Mild

CAUTION!

Will burn.

Causes skin irritation.

May cause allergic skin reaction.

Causes eye irritation.

· **HMIS Rating**

HEALTH = 2 (moderate)

FLAMMABILITY = 1 (slight)

REACTIVITY = 0 (minimal)

CHRONIC = *

3.2 Potential Health Effects

· **Immediate Hazards**

INGESTION: Not expected to be harmful under normal conditions of use.

INHALATION: Not expected to be harmful under normal conditions of use. However, if allowed to become airborne, may cause irritation of nose, throat and lungs.

SKIN: Causes irritation.

EYES: Causes irritation.

· **Delayed Hazards**

4,4'-Isopropylidenediphenol-Epichlorohydrin Copolymer 25068-38-6

May cause allergic skin reaction.

-- See Footnote C.

Footnote C: As of the date of issuance of this document, this material has not been listed by NTP, classified by IARC nor regulated by OSHA as a carcinogen.

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4. First Aid Measures

INGESTION: If accidentally swallowed, dilute by drinking large quantities of water. Immediately contact poison control center or hospital emergency room for any other additional treatment directions.

INHALATION: Remove to fresh air.

SKIN: Flush with plenty of water. Remove contaminated clothing. Call a physician if irritation persists.

EYES: Immediately flush eyes with plenty of water for at least 15 minutes. Eyelids should be held apart during irrigation to insure water contact with entire surface of eyes and lids. Call a physician.

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5. Fire Fighting Measures

Autoignition Temperature	Not available
Upper/Lower Flammable Limits	Not available
Up/Lower Explosive Limits, % by Vol	Not available
Flash Point	480 deg F (249 deg C) (PMCC)

Will burn.

In case of fire, use water spray, dry chemical, foam or CO2. Use water to keep fire-exposed containers cool.

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6. Accidental Release Measures

Sweep (scoop) up and remove to a chemical disposal area. Prevent entry into natural bodies of water.

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7. Handling and Storage

7.1 Handling

Handle in accordance with good industrial hygiene and safety

practices. These practices include avoiding unnecessary exposure and removal of the material from eyes, skin and clothing.

Wash thoroughly after handling. Always use appropriate Personal Protective Equipment (PPE).

INHALATION: Avoid prolonged or repeated breathing of vapor.

SKIN: Avoid contact with skin and clothing.

EYES: Avoid contact with eyes.

7.2 Storage

Keep from freezing.

Store in a cool, dry place.

Keep containers tightly closed.

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8. Exposure Controls/Personal Protection

8.1 Exposure Controls

ENGINEERING CONTROLS: The following exposure control techniques may be used to effectively minimize employee exposure: local exhaust ventilation, enclosed system design, process isolation and remote control in combination with appropriate use of personal protective equipment and prudent work practices. These techniques may not necessarily address all issues pertaining to your operations. We, therefore, recommend that you consult with experts of your choice to

determine whether or not your programs are adequate.

If airborne contaminants are generated when the material is heated or handled, sufficient ventilation in volume and air flow patterns should be provided to keep air contaminant concentration levels below acceptable criteria.

8.2 Personal Protection

Where air contaminants can exceed acceptable criteria, use NIOSH/MSHA approved respiratory protection equipment. Respirators should be selected based on the form and concentration of contaminants in air in accordance with OSHA laws and regulations or other applicable standards or guidelines, including ANSI standards regarding respiratory protection. Use goggles if contact is likely. Wear impervious gloves as required to prevent skin contact.

8.3 Exposure Guidelines

4,4'-Isopropylidenediphenol-Epichlorohydrin Copolymer 25068-38-6

ACGIH TLV: NONE ESTABLISHED

OSHA PEL: NONE ESTABLISHED

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9. Physical and Chemical Properties

Percent Volatiles	Negligible
pH @ 25 C	Not available

Specific Gravity	1.17
Appearance	Transparent viscous liquid
Autoignition Temperature	Not available
Boiling Point	Not available
Vapor Density (Air=1)	Not available
Vapor Pressure, mm Hg @ 20 C	0.03 @ 25 deg C
Evaporation Rate (Butyl Acetate=1)	Not applicable
Upper/Lower Flammable Limits	Not available
Up/Lower Explosive Limits, % by Vol	Not available
Flash Point	480 deg F (249 deg C) (PMCC)
Freezing Point	Not available
Odor	Mild
Odor Threshold, ppm	Not available
Solubility in Water	Negligible
Coefficient of Water/Oil Distrib.	Not available

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10. Stability and Reactivity

Normally stable as defined in NFPA 704-12(4-3.1).

· **Incompatibilities:**

Oxidizers, acids

· **Decomposition products may include:**

CO, aldehydes, organic acids and oxides of nitrogen

· **Hazardous polymerization:**

Will not occur.

· **Other Hazards:**

None known to company.

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11. Toxicological Information

See Section 3 Hazards Identification information.

4,4'-Isopropylidenediphenol-Epichlorohydrin Copolymer 25068-38-6

LC50: Not available

LD50: Not available

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12. Ecological Information

Not determined.

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13. Disposal Considerations

Dispose of according to local, state/provincial, and federal

requirements.

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14. Transport Information

14.1 U.S. Department of Transportation (DOT)

The data provided in this section is for information only and may not be specific to your package size. You will need to apply the appropriate regulations to properly classify your shipment for transportation.

Non-Regulated.

14.2 Canadian Transportation of Dangerous Goods (TDG)

Not determined.

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15. Regulatory Information (Selected Regulations)

15.1 U.S. Federal Regulations

- **OSHA Hazard Communication Standard 29CFR1910.1200**

This material is a "health hazard" and/or a "physical hazard" as determined when reviewed according to the requirements of the Occupational Safety and Health Administration 29 CFR Part 1910.1200

"Hazard Communication" Standard.

· **SARA Title III: Section 311/312**

Immediate health hazard

Delayed health hazard

· **SARA Title III Section 313 and 40 CFR Part 372**

This product contains the following toxic chemical(s) subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986, and Subpart C-Supplier Notification Requirement of 40 CFR Part 372.

None required per SARA TITLE III SECTION 313.

· **TSCA Section 8(b) Inventory**

All reportable chemical substances are listed on the TSCA Inventory. We rely on certifications of compliance from our suppliers for chemical substances not manufactured by us.

15.2 Canadian Regulations

· **Workplace Hazardous Materials Information System (WHMIS)**

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulation (CPR) and the MSDS contains all the information required by the CPR.

CLASS D, DIV 2B

· **Canadian Environmental Protection Act (CEPA)**

All reportable chemical substances are listed on the Domestic Substances List (DSL) or otherwise comply with CEPA new substance notification requirements.

· **National Pollutant Release Inventory (NPRI)**

This product contains the following chemical(s) subject to the reporting requirements of the Canadian Environmental Protection Act (CEPA) subsection 16(1), National Pollutant Release Inventory.
None required.

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16. Other Information

HL (Cautions Required): Products bearing the HL Health Label (Cautions Required) Seal of The Art & Creative Materials Institute, Inc. (ACMI) are certified to be properly labeled in a program of toxicological evaluation by a medical expert. This program is reviewed by ACMI's Toxicological Advisory Board. These products are certified by ACMI to be labeled in accordance with the chronic hazard

labeling standard, ASTM D-4236 and Federal Law, P.L. 100-695.

· **User's Responsibility**

The OSHA Hazard Communication Standard 29CFR 1910.1200 and the Workplace Hazardous Materials Information System (WHMIS) require that the information contained on these sheets be made available to your workers. Educate and train your workers regarding OSHA and WHMIS precautions. Instruct your workers to handle this product properly. Consult with appropriate experts to guard against hazards associated with use of this product and its ingredients.

· **Disclaimer**

SELLER MAKES NO WARRANTY, EXPRESS OR IMPLIED, CONCERNING THE PRODUCT OR THE MERCHANTABILITY OR FITNESS THEREOF FOR ANY PURPOSE, except that the product shall conform to contracted specifications, and that the product does not infringe any valid United States or Canadian patent. No claim of any kind shall be greater in amount than the purchase price of the quantity of product in respect of which damages are claimed. In no event shall Seller be liable for incidental or consequential damages, whether Buyer's claim is based on contract, breach of warranty, negligence or otherwise.

CURRENT ISSUE: 19-FEB-09

PREVIOUS ISSUE: 26-OCT-06

Material Safety Data Sheet

1. Chemical Product and Company Identification

DESCRIPTION: ELMER'S SUPERFAST EPOXY CEMENT HARDENER PHASE

PRODUCT TYPE: POLYAMIDE COMPOUND

APPLICATION: E1009 PART2, 61009 PART 2

· Manufacturer/Supplier Information

MSDS Prepared by:

Elmer's Products, Inc.
1 Easton Oval
Columbus, OH 43219

Emergency Phone Number
Poison Control Center
1-888-516-2502

For additional health, safety or regulatory information, call 1-888-435-6377.

Call 1-800-848-9400 to place an order or request additional MSDSs.

2. Composition, Information on Ingredients

The ingredients listed below have been associated with one or more immediate and/or delayed(*) health hazards. Risk of damage and effects depends upon duration and level of exposure. BEFORE USING, HANDLING, OR EXPOSURE TO THESE INGREDIENTS, READ AND UNDERSTAND THE MSDS.

		% by weight
90-72-2	*Phenol, 2,4,6-Tris((dimethylamino)methyl)-	5-10
112-24-3	*Triethylenetetramine	1-5
68410-23-1	Fatty Acids, C18-Unsatd., Dimers, Reaction Products With Polyethylenepolyamines	10-30

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3. Hazards Identification

3.1 Emergency Overview

Appearance	Amber syrup
Odor	Sulfur

WARNING!

Will burn.

Causes chemical burns to skin.

May cause allergic skin reaction.

Causes chemical burns to eyes.

May be harmful if inhaled. May cause irritation of nose, throat and lungs.

May cause allergic skin and respiratory reactions.

May be harmful if absorbed through skin.

· **HMIS Rating**

```
      HEALTH = 3 (serious)
FLAMMABILITY = 1 (slight)
  REACTIVITY = 0 (minimal)
     CHRONIC = *
```

3.2 Potential Health Effects

· **Immediate Hazards**

INGESTION: Not expected to be harmful under normal conditions of use.
If accidentally swallowed, burns or irritation to mucous membranes, esophagus or GI tract can result.

INHALATION: May be harmful if inhaled. Vapor may cause irritation of nose, throat and lungs.

SKIN May be harmful if absorbed through skin. Causes chemical burns.

EYES: Causes chemical burns.

· **Delayed Hazards**

Phenol, 2,4,6-Tris((dimethylamino)methyl)- 90-72-2

May cause allergic skin reaction.

-- See Footnote C.

Triethylenetetramine 112-24-3

May cause allergic skin and respiratory reactions.

Can cause lung damage. Pre-existing respiratory disorders may be aggravated by exposure.

Can cause liver damage.

Can cause kidney damage.

-- See Footnote C.

Footnote C: As of the date of issuance of this document, this material has not been listed by NTP, classified by IARC nor regulated by OSHA as a carcinogen.

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4. First Aid Measures

INGESTION: If accidentally swallowed, dilute by drinking large quantities of water. Immediately contact poison control center or hospital emergency room for any other additional treatment directions.

INHALATION: If inhaled, remove to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. Call a physician.

SKIN: Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Call a physician. Wash clothing and shoes before reuse.

EYES: Immediately flush eyes with plenty of water for at least 15 minutes. Eyelids should be held apart during

irrigation to insure water contact with entire surface of eyes and lids. Call a physician.

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5. Fire Fighting Measures

Autoignition Temperature	Not available
Upper/Lower Flammable Limits	Not available
Up/Lower Explosive Limits, % by Vol	Not available
Flash Point	495 deg F (257 deg C) (COC)

Will burn.

In case of fire, use water spray, dry chemical, foam or CO2. Use water to keep fire-exposed containers cool.

---

6. Accidental Release Measures

Sweep (scoop) up and remove to a chemical disposal area. Prevent entry into natural bodies of water.

---

7. Handling and Storage

7.1 Handling

Handle in accordance with good industrial hygiene and safety practices. These practices include avoiding unnecessary exposure and removal of the material from eyes, skin and clothing.

Wash thoroughly after handling. Always use appropriate Personal Protective Equipment (PPE).

INHALATION: Avoid breathing vapor. Use with adequate ventilation.

SKIN: Do not get on skin or on clothing.

EYES: Do not get in eyes.

7.2 Storage

Store in a cool, dry place.

Keep containers tightly closed.

---

8. Exposure Controls/Personal Protection

8.1 Exposure Controls

ENGINEERING CONTROLS: The following exposure control techniques may be used to effectively minimize employee exposure: local exhaust ventilation, enclosed system design, process isolation and remote control in combination with appropriate use of personal protective equipment and prudent work practices. These techniques may not necessarily address all issues pertaining to your operations. We, therefore, recommend that you consult with experts of your choice to determine whether or not your programs are adequate.

If airborne contaminants are generated when the material is heated or

handled, sufficient ventilation in volume and air flow patterns should be provided to keep air contaminant concentration levels below acceptable criteria.

8.2 Personal Protection

Wear synthetic apron and boots if contact is likely. Where air contaminants can exceed acceptable criteria, use NIOSH/MSHA approved respiratory protection equipment. Respirators should be selected based on the form and concentration of contaminants in air in accordance with OSHA laws and regulations or other applicable standards or guidelines, including ANSI standards regarding respiratory protection. Use goggles and face shield if contact is likely. Wear impervious gloves as required to prevent skin contact.

8.3 Exposure Guidelines

Phenol, 2,4,6-Tris((dimethylamino)methyl)- 90-72-2

ACGIH TLV: NONE ESTABLISHED

OSHA PEL: NONE ESTABLISHED

Triethylenetetramine 112-24-3

ACGIH TLV: NONE ESTABLISHED

OSHA PEL: NONE ESTABLISHED

Fatty Acids, C18-Unsatd., Dimers, Reaction Products With Polyethylenepolyamines 68410-23-1

ACGIH TLV: NONE ESTABLISHED

OSHA PEL: NONE ESTABLISHED

9. Physical and Chemical Properties

Percent Volatiles	0.3 @ 70 deg F (21 deg C)
pH @ 25 C	Not available
Specific Gravity	1.15
Appearance	Amber syrup
Autoignition Temperature	Not available
Boiling Point	Not available
Vapor Density (Air=1)	Not available
Vapor Pressure, mm Hg @ 20 C	Not available
Evaporation Rate (Butyl Acetate=1)	Not applicable
Upper/Lower Flammable Limits	Not available
Up/Lower Explosive Limits, % by Vol	Not available
Flash Point	495 deg F (257 deg C) (COC)
Freezing Point	Not available
Odor	Sulfur
Odor Threshold, ppm	Not available
Solubility in Water	Slight 0.1 - 1.0 %
Coefficient of Water/Oil Distrib.	Not available

10. Stability and Reactivity

Normally stable as defined in NFPA 704-12(4-3.1).

- **Incompatibilities:**

Strong oxidizing agents, epoxy resins and amine mixtures especially when hot.

· **Decomposition products may include:**

H2S and oxides of carbon, nitrogen and sulfur.

· **Hazardous polymerization:**

Will not occur.

· **Other Hazards:**

None known to company.

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11. Toxicological Information

See Section 3 Hazards Identification information.

Phenol, 2,4,6-Tris((dimethylamino)methyl)- 90-72-2

LC50: Not available

LD50: orl-rat=1200 mg/kg; skn-rat=1280 mg/kg (RTECS)

Triethylenetetramine 112-24-3

LC50: Not available

LD50: orl-rat=2.5 g/kg (Merck)

Fatty Acids, C18-Unsatd., Dimers, Reaction Products 68410-23-1

With Polyethylenepolyamines

LC50: Not available

LD50: Not available

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12. Ecological Information

Not determined.

---

13. Disposal Considerations

Dispose of according to local, state/provincial, and federal requirements.

---

14. Transport Information

14.1 U.S. Department of Transportation (DOT)

The data provided in this section is for information only and may not be specific to your package size. You will need to apply the appropriate regulations to properly classify your shipment for transportation.

Non-Regulated.

14.2 Canadian Transportation of Dangerous Goods (TDG)

Not determined.

---

15. Regulatory Information (Selected Regulations)

15.1 U.S. Federal Regulations

· **OSHA Hazard Communication Standard 29CFR1910.1200**

This material is a "health hazard" and/or a "physical hazard" as determined when reviewed according to the requirements of the Occupational Safety and Health Administration 29 CFR Part 1910.1200 "Hazard Communication" Standard.

· **SARA Title III: Section 311/312**

Immediate health hazard

Delayed health hazard

· **SARA Title III Section 313 and 40 CFR Part 372**

This product contains the following toxic chemical(s) subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986, and Subpart C-Supplier Notification Requirement of 40 CFR Part 372.

None required per SARA TITLE III SECTION 313.

· **TSCA Section 8(b) Inventory**

All reportable chemical substances are listed on the TSCA Inventory. We rely on certifications of compliance from our suppliers for chemical substances not manufactured by us.

15.2 Canadian Regulations

· **Workplace Hazardous Materials Information System (WHMIS)**

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulation (CPR) and the MSDS contains all the information required by the CPR.

CLASS D, DIV 1B

CLASS D, DIV 2A, 2B

CLASS E

· **Canadian Environmental Protection Act (CEPA)**

All reportable chemical substances are listed on the Domestic Substances List (DSL) or otherwise comply with CEPA new substance notification requirements.

· **National Pollutant Release Inventory (NPRI)**

This product contains the following chemical(s) subject to the reporting requirements of the Canadian Environmental Protection Act (CEPA) subsection 16(1), National Pollutant Release Inventory.
None required.

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16. Other Information

HL (Cautions Required): Products bearing the HL Health Label (Cautions Required) Seal of The Art & Creative Materials Institute, Inc. (ACMI) are certified to be properly labeled in a program of toxicological evaluation by a medical expert. This program is reviewed by ACMI's Toxicological Advisory Board. These products are certified by ACMI to be labeled in accordance with the chronic hazard labeling standard, ASTM D-4236 and Federal Law, P.L. 100-695.

· **User's Responsibility**

The OSHA Hazard Communication Standard 29CFR 1910.1200 and the Workplace Hazardous Materials Information System (WHMIS) require that the information contained on these sheets be made available to your workers. Educate and train your workers regarding OSHA and WHMIS precautions. Instruct your workers to handle this product properly. Consult with appropriate experts to guard against hazards associated with use of this product and its ingredients.

- **Disclaimer**

SELLER MAKES NO WARRANTY, EXPRESS OR IMPLIED, CONCERNING THE PRODUCT OR THE MERCHANTABILITY OR FITNESS THEREOF FOR ANY PURPOSE, except that the product shall conform to contracted specifications, and that the product does not infringe any valid United States or Canadian patent. No claim of any kind shall be greater in amount than the purchase price of the quantity of product in respect of which damages are claimed. In no event shall Seller be liable for incidental or consequential damages, whether Buyer's claim is based on contract, breach of warranty, negligence or otherwise.

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