

REVISED
Nov. 2014



MATERIAL SAFETY DATA SHEETS

1. CHEMICAL PRODUCT

Adhesive Systems, Inc.
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Product Name: **MP54110 Part A (Resin)**

Technical Name: **Epoxy Resin**

2. HAZARDS IDENTIFICATION

MEDICAL CONDITIONS PRONE TO AGGRAVATION BY EXPOSURE: Preexisting disorders of the skin and/or eyes.

EYE CONTACT: Contains ingredients which are irritating to the eyes. Symptoms may include blurred vision, burning sensation and tearing.

SKIN CONTACT: Contains materials which cause moderate skin irritation. This product may cause skin sensitization or allergic reactions which may be severe with certain people. Symptoms include rash, itching, hives and swelling of extremities. Prolonged or repeated exposure may cause a defatting or drying action to skin.

INHALATION: Unlikely at room temperature due to low volatility, however heating can generate vapors that may cause respiratory irritation.

INGESTION: Product is harmful if swallowed

CHRONIC HEALTH EFFECTS The Bisphenol-A epoxy (DGEBA) resin this product contains has been shown to be mutagenic in some microbial tests, but failed to show mutagenicity in others, the significance of this is unknown.

Chromosomal aberrations were observed in cultured rat liver cells. Two year bioassays on mice exposed by the dermal route to DGEBA resin gave only very limited evidence of weak carcinogenicity. Based on this and other evidence the International Agency for Research on Cancer (IARC) concluded in 1988 that DGEBA epoxy resins are not classifiable as carcinogens.

Hazard Classification: N/A

Physical Classification:

Symbol: None

Signal Word: None

Health Classification:

Irritant: Causes mild skin or eye irritation Category 3



Symbol:

Signal Word: Warning

3. COMPOSITION AND INFORMATION ON HARMFUL INGREDIENTS

| Ingredients | Cas No. | OSHA PEL | ACGIH TLV | Other Limits | % Composition |
|---|------------|----------|-----------|--------------|---------------|
| Bisphenol-A- (epichlorohydrin); epoxy resin (number average molecular weight <+700). | 25068-38-6 | N/A | N/A | N/A | 100 |

*Proprietary means the specific chemical identity and/or weight percent is being withheld as a trade secret.



MATERIAL SAFETY DATA SHEETS

MP 54110 Part A (Resin)

Epoxy Resin

4. FIRST AID MEASURES

Eye Protection: Flush eyes with water for atleast 15 minutes. Take to a physician for medical treatment.

Skin Contact: Wash affected areas with soap and water. Remove contaminated clothing. Consult a physician if irritation persists.

Inhalation: Move person to fresh air. Restore breathing. Treat symptomatically. Consult a physician.

Ingestion: Drink plenty of water to dilute. Do not induce vomiting. Give medical attention immediately. Never give anything by mouth to an unconscious person.

5. FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA: Water fog, carbon dioxide, foam or dry chemical.

SPECIAL FIRE FIGHTING PROCEDURES: Full protective equipment including self-contained breathing apparatus should be used. Water spray may be used to cool fire exposed container to prevent pressure build-up and possible auto-ignition or rupture.

UNUSUAL FIRE & EXPLOSION HAZARDS: Keep containers tightly closed. Water maybe used to cool unruptured containers.

6. ACCIDENTAL RELEASE MEASURES

Spill control: Contain and remove with absorbent material. Avoid contact.

Containment: Dike, contain, and absorb with clay, sand, or other suitable material.

Cleanup: For large spills, pump to storage/salvage vessels. Soak up residue with clay, sand, or other suitable material.

Special procedures: Prevent spill from entering drainage/sewer systems, waterways, and surface waters

7. HANDLING AND STORAGE

Do not get in eyes, on skin or clothing. Wash with soap and water after using. Particularly before eating, drinking, smoking, applying cosmetics, or using toilet facilities. Air dry and then launder contaminated clothing and protective gear before reuse.

Storage: Keep in a cool, dry place. Keep containers closed when not in use. Keep away from open flames and high temperatures.

8. EXPOSURE CONTROL AND PERSONAL PROTECTION

OSHA PEL: N/A

Engineering Controls: Use good general local ventilation when working with this material.

Eye Protection: Safety goggles / glasses suitable for use with chemicals.

Respiratory protection: None required under normal conditions of use.

Skin Protection: Nitrile / polyethylene gloves, coveralls, avoid cotton products.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odor: Liquid, Mild Epoxy Odor

Flashpoint: >200°F

Solubility in Water: Slight

Boiling Point:>400 °F

Specific Gravity: 1.16

Evaporation rate: N/D

Melting Point: N/D

Vapor Pressure: <1mm Hg



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MP 54110 Part A (Resin)

Epoxy Resin

10. REACTIVITY AND STABILITY

This material is chemically stable. Hazardous polymerization will not occur.

Conditions to avoid: Avoid high temperatures.

Incompatible materials: Oxidizers, acids, and bases.

11. TOXICOLOGICAL INFORMATION

Acute oral effects: LD50 > 2000 mg/kg

Acute dermal effects: LD50 > 2000 mg/kg

Sensitization: May cause skin sensitization.

Carcinogenicity: Recent 2-year bioassays in rats and mice exposed dermally yielded no evidence of carcinogenicity.

Mutagenicity: Resins of this type have proved to be inactive when tested by in vivo mutagenicity assays. These resins have shown activity in in vitro microbial mutagenicity screening and have produced chromosomal aberrations in cultured rat liver cells. The significance of these tests to man is unknown.

Inhalation effects: Not expected to be relevant, however, when exposure to vapors or mists is possible, it could cause respiratory tract irritation.

Skin effects: May be mildly irritating. May cause skin sensitization.

Eye effects: May be mildly irritating.

Ingestion effects: Not likely to be a relevant route of exposure.

12. ECOLOGICAL INFORMATION

Biodegradability: This section will be completed as ecological reviews are completed.

Toxicity to fish: This section will be completed as ecological reviews are completed.

13. DISPOSAL INFORMATION

This material must be disposed in compliance with local, state, and federal regulations. When in consumer packaging this material must be disposed of as household waste. Check local and state regulations for disposal of this product as a household waste in your state or municipality.

14. TRANSPORTATION INFORMATION

Not regulated for transport.



MATERIAL SAFETY DATA SHEETS

MP54110 Part A (Resin)

Epoxy Resin

15. REGULATORY INFORMATION

TSCA: All components listed.

DSL: All components listed.

SARA Section 311/312 hazard classes: Chronic health hazard.

California Proposition 65: Contains Phenyl Glycidyl Ether (< 6 PPM), which was listed as carcinogenic on October 1st, 1990.

16. OTHER INFORMATION

Initial: 8/22/2007

Revised: Nov. 2014

| | | | |
|------|----------|----------------|--------------|
| HMIS | HEALTH 2 | FLAMMABILITY 1 | REACTIVITY 0 |
| NFPA | HEALTH 2 | FIRE HAZARD 1 | REACTIVITY 0 |

Updated November 2014

NON-WARRANTY: Information contained herein is based on tests we believe to be reliable and accurate. It is offered in good faith for the benefit of the consumer. Adhesive Systems shall not be liable for any injury, loss, or damage in the use of its chemical products since the conditions of use are beyond our control. In every case we urge and recommend the user conduct tests to determine to their own satisfaction that the product is of acceptable quality and is suitable for their particular purpose under their own operating conditions. Statements concerning the possible use of our products are not intended as recommendations to use our products in the infringement of any patent. Because of changing reporting requirements and other variables it is impossible to guarantee the accuracy of the information contained in this document. It is the responsibility of the user to determine proper personal protection based on the actual condition of use and to comply with all Federal, State, and Local laws and regulations.

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For technical information
and support call **1-800-552-0299** or visit our website at

www.instantca.com

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International +01+813-248-0585

Product Name: MP 54110 Part B (Hardener)

Technical Name: Polyamine Blend (Mixture)

2. HAZARDS IDENTIFICATION

Inhalation effects: Symptoms may include burning sensation, coughing, and shortness of breath.

Skin effects: May be mildly irritating. May cause skin sensitization. Redness.

Ingestion effects: Not likely to be a relevant route of exposure.

Human health hazards: May be irritating to the skin. May cause skin sensitization.

Hazard Classification: N/A

Physical Classification:

Symbol: None

Signal Word: None

Health Classification:

Irritant: Causes mild skin or eye irritation Category 3



Symbol:

Signal Word: Warning

3. COMPOSITION AND INFORMATION ON HARMFUL INGREDIENTS

| Ingredients | Cas No. | OSHA PEL | ACGIH TLV | Other Limits | %Composition |
|----------------------|-------------|----------|-----------|--------------|--------------|
| Polymercaptan Resin* | Proprietary | N/A | N/A | N/A | |
| PolyAmide Resin* | Proprietary | N/A | N/A | N/A | |

*Proprietary means the specific chemical identity and/or weight percent is being withheld as a trade secret.



MATERIAL SAFETY DATA SHEETS

MP 54110 Part B (Hardener)

Mixture

4. FIRST AID MEASURES

Inhalation: Remove victim to fresh air and provide oxygen if breathing is difficult. Give artificial respiration if not breathing. Get medical attention.

Skin contact: In case of contact with hot product, immediately flood the affected area with cold water. Wipe excess material from exposed area. Flush exposed skin with water and follow by washing with soap if available. Carefully remove clothing; Transport to nearest medical facility for additional treatment.

Eye contact: Flush eye with water. If symptoms persist, consult a physician.

Ingestion: Do not induce vomiting. Give medical attention immediately.

5. FIRE FIGHTING MEASURES

Flash Point: >200°F (PMCC)

Flammable Limits: LEL=N/D UEL=N/D

Extinguishing Media: Water fog, foam, dry chemical or CO₂.

Special protective equipment for fire fighters: Full protective equipment including self contained breathing apparatus should be used.

Unusual Fire and Explosion Hazards: Keep containers tightly closed. Water may be used to cool containers.

6. ACCIDENTAL RELEASE MEASURES

Ventilate area of spill. Flood area with water to polymerize. Absorb with sand / earth and dispose in accordance with local, state, and federal regulations.

7. HANDLING AND STORAGE

When using large volumes ensure that operational area is well ventilated.

Store between 5-25°C; avoid strong light and heat sources. These products should never be frozen.

Avoid skin contact and inhalation of vapor.

8. EXPOSURE CONTROL AND PERSONAL PROTECTION

Engineering Controls: Use good general local ventilation when working with this material.

Eye Protection: Safety goggles / glasses suitable for use with chemicals.

Respiratory Protection: Always use appropriate filter mask / respirator.

Skin Protection: Nitrile / polyethylene gloves, coveralls, avoid cotton products.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odor: Clear to slight amber liquid with mercaptan-like odor.

Flash Point: 200°F (PMC C)

Boiling Point: Not Determined

Specific Gravity @ 25°C: 1.11-1.13

Vapor Pressure: Not Determined

Melting Point: Not Determined

Vapor Density: Not Determined

Evaporation Rate: Not Determined

Solubility in Water: Negligible (<0.1%)



MATERIAL SAFETY DATA SHEETS

MP 54110 Part B (Hardener)

Mixture

10. REACTIVITY AND STABILITY

Stability: Stable

Incompatibility: Oxidizers

Hazardous Polymerization: Will not occur.

Conditions to Avoid: No known conditions to avoid.

Hazardous Decomposition: Oxides of carbon, nitrogen, and sulfur; hydrogen sulfide

11. TOXICOLOGICAL INFORMATION

Routes of Exposure; Inhalation and skin

Related Symptoms: Moderate respiratory tract irritation. Moderate skin irritation , redness.

Chronic Effects: Chronic Exposure may lead to kidney or liver damage. Use adequate ventilation to maintain airborne concentration below exposure limits. Not believed to represent a carcinogenic or mutagenic hazard.

12. ECOLOGICAL INFORMATION

None.

13. DISPOSAL INFORMATION

This material must be disposed in compliance with local, state, and federal regulations. When in consumer packaging this material must be disposed of as household waste. Check local and state regulations for disposal of this product as a household waste in your state or municipality.

14. TRANSPORTATION INFORMATION

DOT INFORMATION: Not regulated for highway transportation.

AIR INFORMATION (IATA): UN3334, Aviation Regulated Liquid, N.O.S. (Mercaptan Amine Blend), 9



MATERIAL SAFETY DATA SHEETS

MP 54110 Part B (Hardener)

Mixture

15. REGULATORY INFORMATION

TSCA

All ingredients of this product are listed, or are exempt from listing, on the TSCA inventory.

SARATitleIII,Section13

This product does contain the following chemical(s) which are defined as toxic chemicals under and subject to the reporting requirements of, Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40CFR Part 372.

Methyl Methacrylate

16. OTHER INFORMATION

Initial: 8/22/2007

Revised: Nov. 2014

HMIS
NFPA

HEALTH 2
HEALTH 2

FLAMMABILITY 1
FIRE HAZARD 1

REACTIVITY 0
REACTIVITY 0

Updated November 2014

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