

SAFETY DATA SHEET

Revised MARCH 2016

1. CHEMICAL PRODUCT

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EMERGENCY PHONE 1-800-255-3924

International +01+813-248-0585

Product Name: MP 54420, MP54421HV, MP54421HVBK, MP54460, Part A (Resin)

Technical Name: Epoxy Resin

2. HAZARDS IDENTIFICATION

GHS CLASSIFICATION(S)

Health: Skin Irritation, Category 2

Eye Irritation, Category 2A
Skin Sensitization, Category 1
Acute Toxicity Oral, Category 4

GHS LABEL ELEMENTS:



Signal Word: Warning

Hazard Statements:

H302: Harmful if swallowed.

H315: Causes skin irritation.

H317: May cause allergic skin reaction.

H319: Causes serious eye irritation.

Precautionary/Prevent Statements:

P270: Do not eat, drink or smoke when using this product.

P273: Avoid release to the environment.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

5468C4VS: Contain epoxy constituents. May produce an allergic reaction.

P261: Avoid breathing dust/fume/gas/mist/vapors/spray.

P272: Contaminated work clothing should not be allowed in the work place.

P362: Take off contaminated clothing and wash before reuse.

P363: Wash contaminated clothing before reuse.

P391: Collect spillage.

P264: Wash skin and hands thoroughly after handling.

Response:

P305+P351+P338: IF IN EYES: Rinse continuously with water for several minutes.

Remove contact lenses,

if present and easy to do. Continue rinsing.

P313: Get medical advice/attention.

P302+P352: IF ON SKN: Wash with plenty of soap and water.

P333+P313: If skin irritation or rash occurs: Get medical advice/attention.

Storage:

P403+P235: Store in a well ventilated place. Keep cool.

Disposal:

7944L501: Dispose of in a manner consistent with local, state, and federal regulations.

3. COMPOSITION AND INFORMATION ON INGREDIENTS

Ingredients	Cas No.		%Composition
Epoxy resin	25068-38-6		80-100 5-15 <5
Polyglycol	41638-13-5		

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; if clothing is stuck to a burn area do not pull it off, but cut around it. Cover burn area do not pull it off, but cut around it. Transport to nearest medical facility for additional treatment.

Eye contact: Flush eye with water. Rest eyes for 30 minutes. If symptoms persist, consult a physician. Ingestion: Do not induce vomiting. Have victim rinse out mouth with water, then drink sips of water to remove taste from mouth. In general, no treatment is necessary unless large quantities are ingested. However, get medical advice. If vomiting occurs spontaneously, keep head below hips to prevent aspiration.

5. FIRE FIGHTING MEASURES

Flammable Class: Not flammable.

Extinguishing media: Carbon dioxide, dry chemical, foam, or water fog.

Hazardous combustion products: Carbon monoxide, carbon dioxide, phenolics.

Explosion hazards: None known.

Fire fighting procedures: Use water spray to knock down vapors and to keep containers cool.

Fire fighting equipment: As in any fire, wear self-contained apparatus pressure demand (MSHA/NIOSH approved approved or equivalent) and full protective gear.

Fire explosion: None known.

Sensitive to static discharge: None known.

Sensitivity to impact: None known.

Hazardous decomposition products: Carbon dioxide, carbon monoxide, and other toxic or irritating compounds may form when heated to decomposition.

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILL: Absorb liquid and place in a sealed container.

LARGE SPILL: Contain spill with dike to prevent entry into sewers. Absorb liquid and place in sealed container for disposal.

ENVIRONMENTAL PRECAUTIONS:

Water Spill: This material is a water pollutant and should be prevented from contaminating soil or from entering sewage and drainage systems and bodies of water.

Land Spill: None known.

Air Spill: None known.

7. HANDLING AND STORAGE

GENERAL PROCEDURES: Use with adequate ventilation. Avoid contact with eyes, skin, and clothing.

HANDLING: Avoid breathing dust/vapor/mist/gas. Avoid contact with skin/eyes/clothing. Keep containers closed when not in use.

STORAGE: Store in a cool place in original container. Protect from sunlight. Keep away from sources of ignition.

STORAGE TEMPERATURE(S): Store between 50°F and 75°F.

LOADING TEMPERTURE: Not Established.

STORAGE PRESSURE: Not Established.

8. EXPOSURE CONTROL AND PERSONAL PROTECTION

ENGINEERING CONTROLS: Not established.

PERSONAL PROTECTIVE EQUIPMENT:

Eyes and Face: For normal conditions, wear safety glasses. Where there is reasonable probability of liquid contact, wear splash proof goggles.

Skin: Wear rubber gloves to avoid prolonged contact.

Respiratory: Use only in a well ventilated area.

Protective Clothing: Wear rubber gloves and apron.

WORKING HYGENIC PRACTICES: Avoid contact with skin and eyes. Wash thoroughly after handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odor:

White/slight

pH: Not established.

Per cent of Volatile: Not established Flashpoint:>200°C (CC-Closed Cup) Vapor Pressure: 0.03 mmHg @ 25°C

Vapor Density: No data available on this product.

Boiling Point: >320°C

Freezing Point: No data available on this product. Melting Point: No data available on this product.

Thermal Decomposition: No data available on this product.

Solubility in Water: Slight (5.4 to 8.4 mg/L @ 20°C)

Specific Gravity: 1.12

Evaporation rate: No data available on this product.

Melting Point: N/D
Percent of volatiles: 0%

10. REACTIVITY AND STABILITY

STABLE: Yes under normal conditions

HAZARDOUS POLYMERIZATION: No under normal conditions.

STABILITY: Stable

POLYMERIZATION: Will not occur.

CONDITIONS TO AVOID: Avoid temperatures above 300°F.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide, carbon dioxide, and other organic substances may be formed during combustion ($>500^{\circ}F$) temperature degradation.

INCOMPATIBLE MATERIALS: Strong acids, oxidizing agents, mineral and organic bases, and especially aliphatic amines.

COMMENTS: REACTIVITY: Product may react if exposed to oxidizing materials, acids, or bases.

11. TOXICOLOGICAL INFORMATION

ACUTE:

Eyes: Direct contact may cause mild irritation.

Dermal (LD₅₀): 23000 mg/kg (Rabbit) Oral (LD₅₀): 15000 mL/kg (Rat) Inhalation (LC₅₀): No data available

Eye Effects: Mildly to moderately irritating.

Skin Effects: Irritating to skin. May cause allergic skin reaction with prolonged contact.

Chronic: Repeated exposure may cause skin sensitization.

Subchronic: None Known.

CARCINOGENICITY:

IARC: Not Listed. NTP: Not Listed. OSHA: Not Listed.

Repeated dose effects: None Known.

Irritation: Prolonged or repeated skin contact may cause irritation.

Corrosivity: None Known.

Sensitization: May cause sensitization.

Neurotoxicity: None Known.
Genetic Effects: None Known.
Reproductive Effects: None Known.
Target Organs: None Known.
Teratogenic Effects: None Known.
Mutagenicity: None Known.

Synergistic Materials: None Known.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL DATA: Do not flush to sewer.

ECOTOXICOLOGICAL INFORMATION:

Harmful to aquatic life. No evidence is currently available on this product effects.

BIOACCUMULATION/ACCUMULATION: Slight

PERSISTANCE/DEGRADABILITY: Not easily biodegradable.

13. DISPOSAL INFORMATION

This material must be disposed in compliance with local, state, and federal regulations. Follow 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: DOT, IMO/IMDG, ADR/RID, ICAO/IATA.

15. REGULATORY INFORMATION

TSCA: All components are listed or are exempt from listing on the Toxic Substances Control Act inventory.

SARA Title III (Superfund Amendments and Reauthorization Act)

Fire: No Pressure Generating: No Reactivity: No

Acute: No Chronic: No

CERCLA/SARA Section 302 EHS: No reportable components.

CERCLA/SARA Section 311/312: Immediate health, delayed health.

CERCLA/SARA Section 313: No reportable components.

To the best of our knowledge this product does not contain chemicals at

levels which require reporting under this statute.

CALIFORNIA PROPOSITION 65: No California Proposition 65 ingredients are known

to be in this product.

CANADA:

CEPA DSL/NDSL Status: All components are listed or exempt from listing on the Canadian

Domestic Substances List.

WHMIS HAZARD SYMBOL AND CLASSIFICATION:

Toxic Symbol: Irritant

WHMIS Class: D2B- Eye or Skin Irritant

D2B-Skin Sensitizer

16. OTHER INFORMATION

Initial: 8/22/2007

Revised: March 2016

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

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 it's 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.

Engineering Excellence

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





A Division Of Royal Adhesives & Sealants LLC.

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Product Name: MP 54420, MP54421HV, MP54421HVBK, MP54460 Part B

(Hardener)

Technical Name: Curing Agent for Adhesive

2. HAZARD IDENTIFICATION

<u>Classification of the mixture:</u> Skin Irritation – Category 2

Eye Irritation –
Category 2A
Skin Sensitization
– Category 1

Acute Toxicity Oral – Category 4

Signal Word: Warning

Hazard Statement: H315-Skin Irritation H320-Eye Irritation

H317-Skin Sensitization H302-Harmful if swallowed

Precautionary Statement:

product.

P270 – Do not eat, drink or smoke when using this

P271 - Use only in well ventilated area.

P280 – Wear eye protection and protective gloves. P302+P352 – IF ON SKIN: Wash with plenty of soap and water. P501 – Dispose of contents/container according to local, regional, national, and

international regulations.

Other Hazards: No additional information available.

NFPA ratings (scale 0 – 4): HMIS ratings (scale 0 – 4):

Health = 2, Fire = 1, Reactivity = 0 Health = 2, Fire = 1, Reactivity = 0

3. COMPOSITION AND INFORMATION ON INGREDIENTS

<u>Chemical Name:</u> Polyamide <u>CAS No. Description:</u> 68410-23-1

<u>CAS No. Description:</u> 102-71-6

Chemical Name: 2,4,6-tris(dimethylaminomethyl) CAS No. Description: 90-72-2

phenol

Chemical Name: Ethylene Amine **CAS No. Description:** 140-31-8

4. FIRST AID MEASURES

After inhalation: Supply fresh air and be sure to call for a doctor.

After skin contact: Immediately wash with water and soap and rinse

thoroughly. Remove contaminated clothing. Launder

contaminated clothing before re-use.

After eye contact:

attention

Rinse opened eye for several minutes under running water. Seek medical

if irritation develops.

After swallowing: Do not induce vomiting; immediately call for medical help.

5. FIRE FIGHTING MEASURES

Suitable extinguishing agents: Water spray (fog), foam, dry chemical or carbon dioxide. Special firefighting procedures: Wear self-contained breathing apparatus and full protective clothing, such as turn-out gear. Cartridge respirators do not provide adequate protection for fire fighters or exotherm mitigation. Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire.

Unusual fire or explosion hazards: May liberate large quantities of dense, foul-smelling smoke which may contain unidentified toxic gasses.

Hazardous combustion products: Oxides of carbon and nitrogen, and undetermined organics.

6. ACCIDENTAL RELEASE MEASURES

Use personal protection recommended in Section 8, isolate the hazard area and deny entry to unnecessary and unprotected personnel.

Environmental protection: Do not allow product to enter sewers/surface or ground water. Wear appropriate protective equipment and clothing during clean-up. Prevent further leakage or spillage if safe to do so.

Clean-up methods: For large spills absorb onto inert absorbent material and place in sealed container for disposal. Dispose of according to Federal, State and local governmental regulations.

7. HANDLING AND STORAGE

Handling: Ensure good ventilation/exhaustion at the workplace. Protect from heat. Empty containers retain product residue, so obey hazard warnings and handle empty containers as if they were full.

Storage: For safe storage, store at or below 72°F (22°C). Keep container tightly closed and in a cool, well- ventilated place away from incompatible materials.

For information on product shelf life, please review Technical Data Sheet.

8. EXPOSURE CONTROL AND PERSONAL PROTECTION

Engineering Controls: Provide adequate local exhaust ventilation to maintain worker exposure below exposure limits.

Respiratory protection: If exposure limits are exceeded or irritation is experienced, NIOSH approved respiratory protection should be worn.

Protection of hands: The glove material has to be impermeable and resistant to the product/substance/preparation.

Eye protection: Wear safety glasses; chemical goggles (if splashing is possible).

Body protection: Protective work clothing and boots.

9. PHYSICAL AND CHEMICAL PROPERTIES

General information:

Form: Liquid Color: Amber Odor: Slight

Change in condition:

Melting point/Melting range: Undetermined Boiling point/boiling range: Not determined Flash point:

365°F

Ignition temperature: Undetermined Danger of explosion: Not applicable Vapor pressure at 72°F: Not determined

Density at 72°F: 8.33 lbs/gal - Specific Gravity: 1.00

Solubility in/miscibility with Water: Slight

Percent Solids: 100% - Percent Volatiles: 0%

10. REACTIVITY AND STABILITY

Stability: Stable at normal conditions.

Hazardous reactions: Under normal conditions of storage and use, hazardous reactions should not occur.

Hazardous decomposition products: Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons and undetermined organics.

Dangerous reactions: In normal storage hazardous reaction will not occur, reacts

with amines.

Incompatible materials: Keep away from strong oxidizing agents, strong Lewis or

mineral acids. Reactivity: Not available.

Conditions to avoid: Avoid mixing resin (Part A) and curing agent (Part B) unless you plan to use immediately. Failure to observe this precaution may result in excessive heat build-up causing exotherm.

11. TOXICOLOGICAL INFORMATION

Relevant routes of exposure: Skin, Inhalation, Eyes and Ingestion

Potential Health Effects/Symptoms:

Inhalation: May cause respiratory tract irritation.

Skin contact: This product may cause irritation to the skin. This product may cause an

allergic skin reaction. Eye contact: This product may cause irritation to the eyes.

Ingestion: Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

12. ECOLOGICAL INFORMATION

Aquatic or Other Organisms Toxicity: No Data Available.

Information about elimination (Persistence and Degradability): No Data Available.

13. DISPOSAL INFORMATION

Recommended method of disposal: Dispose of according to Federal, State and

local governmental regulations.

Hazard waste number: Material, if discarded, is not expected to be a

characteristic hazardous waste under RCRA.

14. TRANSPORTATION INFORMATION

Land Transport (DOT): Non- Regulated

Marine Transport (IMDG): Non-Regulated

Air Transport (IATA): Non-Regulated

15. REGULATORY INFORMATION

United States Regulatory Information

TSCA 8 (B) Inventory Status:

All components are listed or are exempt from listing

on the Toxic

Substances

Control Act Inventory. TSCA 12 (b) Export Notification:

No reportable

components CERCLA/SARA Sec. 302 EHS:

No reportable

components CERCLA/SARA Sec. 311/312:

Immediate Health,

Delayed Health CERCLA/SAFA Sec. 313: No reportable

components

California Proposition 65:

No California Proposition 65 listed chemicals are known to be

present.

Canada Regulatory Information:

CEPA DSL/NDSL Status: All components are listed on or are exempt from listing on the Canadian Domestic

Substances List.

16. OTHER INFORMATION

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 it's 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

