



MATERIAL SAFETY DATA SHEET

Staple Kit Epoxy Gel (Side A)

1. Product And Company Identification

Supplier Mar-flex Waterproofing & Building Products 500 Business Parkway Carlisle, OH 45005 USA Telephone Number: 513-422-7285 FAX Number: 513-422-7282 E-Mail: info@mar-flex.com Web Site: www.mar-flex.com	Manufacturer Mar-flex Waterproofing & Building Products 500 Business Parkway Carlisle, OH 45005 USA Telephone Number: 513-422-7285 FAX Number: 513-422-7282 E-Mail: info@mar-flex.com Web Site: www.mar-flex.com
Supplier Emergency Contacts & Phone Number Chem-Trec: 1-800-424-9300	Manufacturer Emergency Contacts & Phone Number Chem-Trec: 1-800-424-9300

Issue Date: 12/21/2011

Product Name: Staple Kit Epoxy Gel (Side A)
Chemical Name: Epoxy Resin
CAS Number: 25085-99-8
Chemical Family: Modified Epoxy Resin
MSDS Number: 138
Product Code: IA-68166, - 68167
Product/Material Uses - Used in conjunction with "Side B".
Product Identification Text - Side "A" of the Knit Kit Epoxy Gel.

2. Composition/Information On Ingredients

Ingredient Name	CAS Number	Percent Of Total Weight
EPICHLOROHYDRIN & BISPHENOL A	025085-99-8	100

3. Hazards Identification

Primary Routes(s) Of Entry - Eye, Skin, Inhalation
Eye Hazards - Mild irritant.
Skin Hazards - Moderate irritant. (LD50, rabbits) > 2000 mg/kg
Ingestion Hazards - Oral LD50: (rat) > 2000 mg/kg
Inhalation Hazards - Not expected to be a relevant route of exposure, however, under conditions where exposure to vapors or mists are possible, could cause respiratory tract infection.
Chronic/Carcinogenicity Effects - Many studies have been conducted to assess the potential carcinogenicity of diglycidyl ether of bisphenol A (DGEBA). Although some weak evidence of carcinogenicity has been reported in animals, when all data is considered, the weight of the evidence does not show that DGEBA is carcinogenic. Indeed, the most recent review of the available data by the International Agency for Research (IARC) has concluded that rabbits were exposed by skin contact, the most likely route of exposure, or when pregnant rats or rabbits were exposed orally. In animal studies, this product has not been shown to interfere with reproduction.

Conditions Aggravated By Exposure - Pre-existing skin, eye and respiratory disorders may be aggravated by exposure to components of this product.
Conditions Aggravated By Overexposure - Repeated and/or prolonged exposure may cause skin sensitization, repeated exposures to low molecular weight epoxy resins of this type are not anticipated to cause any significant adverse effects.
Sensitization - Sensitizer



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First Aid (Pictograms)



4. First Aid Measures

Eye - Flush with water. Rest eye for 30 minutes. If any ill effects persist, seek medical attention.

Skin - Wash with soap and water. Wash contaminated clothing before reuse.

Ingestion - Single dose oral toxicity is considered to be extremely low. No hazards anticipated from swallowing small amounts of incidental to normal handling operations.

Inhalation - Remove to fresh air and give oxygen if breathing is difficult. Get medical attention.

Fire Fighting (Pictograms)



5. Fire Fighting Measures

Flash Point: >480 °F >249 °C

Autoignition Point: ND °F

Flammability Class: ND

Lower Explosive Limit: ND

Upper Explosive Limit: ND

Fire And Explosion Hazards - Decomposition and combustion products may be toxic.

Extinguishing Media - Water fog or fine spray, carbon dioxide, dry chemical, foam. Do not use direct water stream. May spread fire. Alcohol resistant foams (ATC type) are preferred if available. General purpose synthetic foams (including AFFF) or protein foams may function, but much less effectively. Water fog, applied gently may be used as a blanket for fire extinguishment. Material will not burn unless preheated. Personnel in vicinity and downwind should be evacuated.

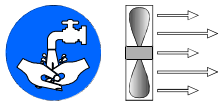
Fire Fighting Instructions - Firefighters should wear self-contained breathing apparatus and full protective gear.

6. Accidental Release Measures

Containment Techniques (Removal of ignition sources, diking, etc.) Dike and contain. Contain runoff and dispose of properly. Remove contaminated soil.

Small spills - wipe with rag. For larger spills use absorbent material. Collect waste in designated container. Flush contaminated area with water.

Handling & Storage (Pictograms)



7. Handling And Storage

Handling Precautions - Causes irritation. May cause allergic skin reaction. Avoid contact with eyes, skin or clothing.

Storage Precautions - Store in cool, dry area in closed cartridges.

Work/Hygienic Practices - Wash hands thoroughly with soap and water after handling.

Avoid breathing vapors. Use with good ventilation.



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Staple Kit Epoxy Gel (Side A)

Protective Clothing (Pictograms)



8. Exposure Controls/Personal Protection

Eye/Face Protection - Safety glasses.

Skin Protection - Rubber or polyethylene gloves. Use of barrier cream recommended.

Respiratory Protection - No respiratory protection is usually required under normal conditions of use. Use adequate ventilation.

Other/General Protection - Use disposable containers and paper on work area. Use appropriate equipment to prevent eye or skin contact.

9. Physical And Chemical Properties

Appearance - Clear

Chemical Type: Mixture

Physical State: Liquid

Boiling Point: >260 °F >500 °C

Specific Gravity: 1.1 - 1.2

Percent Volatiles: <3%

Vapor Pressure: 0.03 mbar at >177 D F

Vapor Density: 1.16-1.17

Solubility: Negligible

Evaporation Rate: <1 (butyl acetate = 1)

10. Stability And Reactivity

Stability: Stable.

Hazardous Polymerization: None known

Conditions To Avoid (Stability) - Elevated temperatures.

Incompatible Materials - Strong oxidizers, strong acids or bases in bulk. Avoid contact with water or liquids.

Hazardous Decomposition Products - Depends on temperature, air supply and the presence of other materials. Uncontrolled exothermic reaction to epoxy resins release phenolics, carbon monoxide and water.

Conditions To Avoid (Polymerization) - Will not occur by itself. Masses of more than one pound (0.5 kg) of product plus an aliphatic amine will cause irreversible polymerization with considerable heat build-up.

11. Toxicological Information

Eye Effects - (Rabbits) Mild irritation

Skin Effects - (Rabbits) Moderate irritation

Acute Oral Effects - **LD₅₀**: (Rabbit) >4000 mg/kg

Chronic/Carcinogenicity - None of the components of this material are listed as carcinogens by NTP, IARC or OSHA. LD 50's provided are the lowest values for types of bisphenol A, Diglycidial Ether Resins used.

12. Ecological Information

No Data Available...



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13. Disposal Considerations

Dispose in accordance with Federal, State and Local regulations.

14. Transport Information

Proper Shipping Name - Caulking Compound

DOT Shipping Label

Caulking Compound.NOI.In Boxes (I-149610)

Freight Class

55

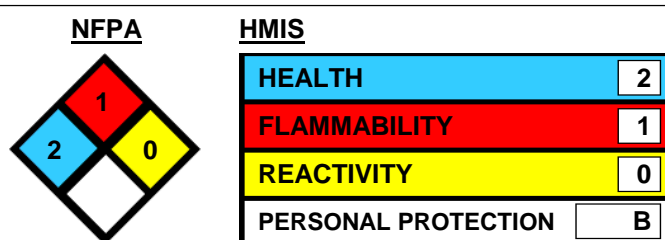
15. Regulatory Information

U.S. Regulatory Information - NEW JERSEY & PENNSYLVANIA TRADE SECRET REGISTRY NUMBER(S) - Phenol,4, 4'-(-1methylethylidene)bis-, polymer with (chloromethyl)oxirane).

State Regulations - Warning: Our products may contain trace amounts of some chemicals considered by the State of California to be carcinogens or reproductive toxicants.

Ingredient(s) - State Regulations

EPICHLOROHYDRIN & BISPHENOL A
California - Proposition 65



16. Other Information

Revision/Preparer Information

This MSDS Supercedes A Previous MSDS Dated: 09/16/2003

This MSDS complies with 29 CFR 1910.1200 (Hazard Communication Standard). This MSDS should be read and understood before using this product.

Disclaimer

The above information pertains to this product as currently formulated and is based on the information available at this time. Addition of reducers or other additives to these products may substantially alter the composition and hazards of the product.

Mar-flex Waterproofing & Building Products makes no warranties, express or implied and assumes no responsibility regarding the suitability of this information for the user's intended purposes or for the consequences of its use. Each individual should make a determination as to the suitability of the information for their particular purposes(s).



MATERIAL SAFETY DATA SHEET

Staple Kit Epoxy Gel (Side A)

Disclaimer - Continued

Mar-flex Building Solutions

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MATERIAL SAFETY DATA SHEET

Staple Kit Epoxy Gel (Side B)

1. Product And Company Identification

Supplier Mar-flex Waterproofing & Building Products 500 Business Parkway Carlisle, OH 45005 USA Telephone Number: 513-422-7285 FAX Number: 513-422-7282 E-Mail: info@mar-flex.com Web Site: www.mar-flex.com	Manufacturer Mar-flex Waterproofing & Building Products 500 Business Parkway Carlisle, OH 45005 USA Telephone Number: 513-422-7285 FAX Number: 513-422-7282 E-Mail: info@mar-flex.com Web Site: www.mar-flex.com
Supplier Emergency Contacts & Phone Number Chem-Trec: 1-800-424-9300	Manufacturer Emergency Contacts & Phone Number Chem-Trec: 1-800-424-9300

Issue Date: 12/21/2011

Product Name: Staple Kit Epoxy Gel (Side B)
 CAS Number: Not Established
 Chemical Family: Epoxy Gel
 MSDS Number: 139

Synonyms
 Epoxy Hardener

Product/Material Uses - Used in conjunction with "Side A".

2. Composition/Information On Ingredients

Ingredient Name	CAS Number		Percent Of Total Weight
4,4'-ISOPROPYLIDENEDIPHENOL-EPICHLOROHDRIN POLYMER	80-05-7	<	10
DIETHYLENETRIAMINE	111-40-0	<	15
N-AMINOETHYLPIPERAZINE	140-31-8	>	20
PHENOL 4-NONYL-, BRANCHED	84852-15-3	<	50

EMERGENCY OVERVIEW

KEEP AWAY FROM CHILDREN & PETS

3. Hazards Identification

Primary Routes(s) Of Entry - Eye, Skin, Ingestion, Inhalation

Eye Hazards - Corrosive.

Skin Hazards - Corrosive.

Inhalation Hazards - Corrosive to respiratory system.

Subchronic (Target Organ Effects) - Eye, skin, respiratory system
 Signs & Symptoms of Exposure - (Acute Effects) - Product vapor in low concentrations can cause lacrimation, conjunctivitis and corneal edema when absorbed into the tissue of the eye from the atmosphere. Corneal edema may give rise to a perception of "blue haze" or "fog" around lights. The effect is transient and has no known residual effect. Burns of the eye may cause blindness. Contact with the skin may cause dryness (defatting), itching and/or rash. Contact of undiluted product with the eyes or skin quickly causes severe irritation and pain and may cause burns, necrosis and permanent injury. Inhalation of vapors may severely damage contacted tissue and produce scarring. Inhalation of aerosols and mists may severely damage contacted tissue and produce scarring. Risk of exposure to hazardous concentrations of vapor under normal working conditions in a well-ventilated space is minimal. However, conditions such as spraying, or sudden release of hot liquid, which generate an aerosol, mists or fog should be avoided. Product is absorbed through the skin and may cause



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Staple Kit Epoxy Gel (Side B)

3. Hazards Identification - Continued

nausea, headache and general discomfort.

Chronic/Carcinogenicity Effects - Prolonged or repeated exposure may cause asthma and skin sensitization or other allergic response.

Signs And Symptoms - Repeated and/or prolonged exposure may cause allergic reaction/sensitization. Repeated and/or prolonged exposures may result in: adverse respiratory effects such as (cough, tightness of chest or shortness of breath, adverse eye effects such as (conjunctivitis or corneal damage), adverse skin effects such as (defatting, rash or irritation. Effects from inhalation of vapors may be delayed. Dryness of nasal passages may be experienced when material is inhaled over a long period of time. Repeated and/or prolonged exposure to low concentrations of vapor may cause: sore throat which are transient.

Conditions Aggravated By Exposure - Asthma, chronic respiratory disease (e.g. Bronchitis, Emphysema), Eye disease, Skin disorders and allergies.

Conditions Aggravated By Overexposure - Will cause burns to skin and eyes. High concentration of vapor can cause irritation of respiratory tract, nausea, and vomiting.

None of the components of this material are listed as carcinogens by NTP, IARC or OSHA.

First Aid (Pictograms)



4. First Aid Measures

Eye - Hold eyelids apart and immediately flush with water for at least 15 minutes. Seek medical advise.

Skin - Remove contaminated clothing and shoes. Remove product and immediately flush affected area with water for at least 15 minutes. Destroy contaminated leather apparel. Cover the affected area with a sterile dressing or clean sheeting and transport for medical care. Do not apply grease or ointment. Control shock, if present. Launder contaminated clothing prior to reuse.

Ingestion - Administer 3-4 glasses of milk or water. DO NOT INDUCE VOMITING. Seek medical attention.

Inhalation - Remove to fresh air. If breathing has stopped or is labored give assisted respiration (e.g. mouth-to-mouth). If affected, administer oxygen if necessary. Seek medical attention. Prevent aspiration of vomit. Turn victim's head to side.

Fire Fighting (Pictograms)



5. Fire Fighting Measures

Flash Point: 230 °F 110 °C

Extinguishing Media - Ignition will give rise to Class B fire. In case of large fire use: water spray, alcohol foam. In case of small fire use: carbon dioxide (CO₂), dry chemical, dry sand or limestone.

Fire Fighting Instructions - Avoid breathing smoke. Use self contained breathing apparatus.

May generate toxic or irritating combustion products. Contact of liquid with skin must be prevented. Sudden reaction and fire may result if product is mixed with and oxidizing agent. May generate carbon monoxide gas. May generate toxic nitrogen oxide gases. May generate ammonia gas. Personnel in vicinity and downwind should be evacuated.



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Staple Kit Epoxy Gel (Side B)

6. Accidental Release Measures

CONTAINMENT TECHNIQUES: (Removal of ignition sources, diking, etc.) Dike and contain. Contain runoff and dispose of properly. Remove contaminated soil.

Small spills - wipe with rag. **For larger spills** use absorbent material. Collect waste in designated container. Flush contaminated area with water.

CLEAN UP PROCEDURES: If recovery is not feasible, admix with dry soil, Sand or non-reactive absorbent and place in an appropriate chemical waste container. Transfer to containers by suction, preparatory for later disposal. Flush area with water spray. Clean-up personnel must be equipped with self-contained breathing apparatus and butyl rubber protective clothing. For large spills, recover spilled material with a vacuum truck.

OTHER EMERGENCY ADVICE: Open enclosed spaces to outside atmosphere. Wear protective clothing, boots, gloves and eye protection.

WASTE DISPOSAL: Comply with all Federal, state and local regulations.

Handling & Storage (Pictograms)



7. Handling And Storage

Handling And Storage Precautions - Store away from heat and open flame.

Handling Precautions - Avoid breathing vapors of heated material.

Storage Precautions - Store away from heat and open flame. Store in cool, dry area in closed cartridges.

Work/Hygienic Practices - Wash thoroughly with soap and water after handling.

Avoid breathing vapors of heated material.

Protective Clothing (Pictograms)



8. Exposure Controls/Personal Protection

Engineering Controls - **Ventilation**: Local if vapors are vented.

Eye/Face Protection - Chemical splash goggles in compliance with OSHA regulations are advised; however, OSHA regulations also permit other types of safety glasses. Consult your safety representative. Provide readily eye wash stations and safety showers.

Skin Protection - Rubber or polyethylene gloves. To prevent repeated and prolonged skin contact, wear impervious clothing and boots.

Respiratory Protection - Not required under normal conditions in a well ventilated workplace. An organic vapor respirator national institute for occupational safety and health (NIOSH) approved for organic vapors is recommended under emergency conditions.

Other/General Protection - Wash at the end of each work shift and before eating, smoking or using the toilet. Promptly remove clothing that becomes contaminated. Use appropriate hand and skin lotions to protect skin. Discard contaminated leather articles.

Ingredient(s) - Exposure Limits

DIETHYLENETRIAMINE

TLV - ppm - 1 ; TWA - mg/m³ - 4.0 ; STEL - ppm - 1

STEL - mg/m³ - N/E (Skin)



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9. Physical And Chemical Properties

Appearance - Yellow, gel like.

Odor - Irritating.

Chemical Type: Mixture

Physical State: Liquid

Boiling Point: >392 °F >200 °C

Percent Volatiles: N/A

Vapor Pressure: <2.0 mm/hg

pH Factor: Alkaline

Solubility: 100%

Evaporation Rate: <1 (BUDAC=1)

10. Stability And Reactivity

Stability: Stable

Hazardous Polymerization: Not known

11. Toxicological Information

No Data Available...

12. Ecological Information

No Data Available...

13. Disposal Considerations

Dispose in accordance with Federal, State and Local regulations.

14. Transport Information

Proper Shipping Name - DOT Non Bulk Shipping Name-
Liquid, corrosive, n.o.s. (Aliphatic Amine)

Hazard Class

8

Secondary Hazard Class

PG III

DOT Identification Number

UN1760

DOT Shipping Label

Corrosive, N.O.S.

Freight Class

55

15. Regulatory Information

U.S. Regulatory Information - U.S. Toxic Substances Control Act (TSCA)

All ingredients of this product are listed under the U.S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

OSHA Hazard Communication Standard (29CFR1910.1200) hazard class(es)

Corrosive. Sensitizer.



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15. Regulatory Information - Continued

EPA SARA Title III Section 312 (40CFR370) hazard class

Immediate Health Hazard. Delayed Health Hazard.

State Regulations -

Ingredient(s) - State Regulations

N-AMINOETHYLPIPERAZINE


New Jersey - Workplace Hazard; Pennsylvania - Workplace Hazard; California - CalARP Table 3 Regulated Substance; Massachusetts - Hazardous Substance

Canadian Regulatory Information - DSL - Included on inventory

WHMIS HAZARD CLASSIFICATION - Class D Division 1B, Class D Division 2B, Class E - Corrosive Material

WHMIS INGREDIENT DISCLOSURE LIST - Aminoethyl piperazine, 1-(2-, (AEP)

WHMIS SYMBOLS - Test tube/hand, Stylized T

<u>NFPA</u>	<u>HMIS</u>								
	<table border="1"><tr><td>HEALTH</td><td>3</td></tr><tr><td>FLAMMABILITY</td><td>1</td></tr><tr><td>REACTIVITY</td><td>0</td></tr><tr><td>PERSONAL PROTECTION</td><td>B</td></tr></table>	HEALTH	3	FLAMMABILITY	1	REACTIVITY	0	PERSONAL PROTECTION	B
HEALTH	3								
FLAMMABILITY	1								
REACTIVITY	0								
PERSONAL PROTECTION	B								

16. Other Information

Revision/Preparer Information

This MSDS Supercedes A Previous MSDS Dated: 01/31/2007

This MSDS complies with 29 CFR 1910.1200 (Hazard Communication Standard). This MSDS should be read and understood before using this product.

Disclaimer

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Mar-flex Waterproofing & Building Products makes no warranties, express or implied and assumes no responsibility regarding the suitability of this information for the user's intended purposes or for the consequences of its use. Each individual should make a determination as to the suitability of the information for their particular purposes(s).

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