



MATERIAL SAFETY DATA SHEET

Quick Set Surface Seal & Peel (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: Quick Set Surface Seal & Peel (Side A)
Chemical Name: Polyurea Paste Adhesive
CAS Number: Not Established
MSDS Number: 108
Product Code: IA-68165

Product/Material Uses - Used in conjunction with "Side B" to temporarily seal cracks and attach surface ports prior to crack injection repair. Easy to remove.

Product Identification Text - Side "A" of the 1:1 Cartridge

2. Composition/Information On Ingredients

Ingredient Name	CAS Number	Percent Of Total Weight
DIPHENYLMETHANE 4,4' DISOCYANATA, MDI	101-68-8	25 - 30

Other ingredients not precisely identified are proprietary or non hazardous as defined in 29 CFR 1910.1200.

EMERGENCY OVERVIEW

This material is designed and intended to be pumped, not sprayed. MDI becomes more hazardous when atomized (sprayed). The following data is derived from tests performed when the material is sprayed and should be considered but may not apply to pumping operations as recommended by the manufacturer.

Potential Health Effects: At room temperature, MDI vapors are minimal due to low vapor pressure. However, heating, foaming, or otherwise dispersing (drumming, venting or pumping) operations may generate more vapor or aerosol concentrations of isocyanate.

KEEP AWAY FROM CHILDREN AND ANIMALS.

3. Hazards Identification

Primary Routes(s) Of Entry - Skin contact

Eye Hazards - Following contact irritation will take place.

Skin Hazards - Prolonged or repeated exposure may cause skin irritation and redness. Skin sensitization or allergic reaction (contact dermatitis) may occur in some individuals.

Ingestion Hazards - Probable oral toxicity, LD(50) (rat), >10g/kg. Irritation of the mouth, larynx, esophagus and stomach can develop upon ingestion.

Inhalation Hazards - No known health information on inhalation of vapors. Vapors and aerosols probably affect respiratory tract. MDI can induce respiratory irritation with asthma-like symptoms. These symptoms may be immediate



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3. Hazards Identification - Continued

or delayed up to several hours after exposure.

Subchronic (Target Organ Effects) - There are reports that long-term exposure may result in decreased lung function.

Conditions Aggravated By Exposure - Allergy, eczema & skin conditions.

Conditions Aggravated By Overexposure - Irritation, sensitization and dermatitis.

Other Effects of Overexposure: In a recent study, groups of rats were exposed for 6 hours/day, 5 days/week for a lifetime to atmospheres of respirable polymeric MDI aerosol. Tumor incidence, both benign and malignant, and the number of animals with tumors were not different from controls. There were no lung tumors at 1 mg/m³ and no effects at .2 mg/m³. However, at the top level only 6 mg/m³ there was a significant incidence of benign tumor of the lung (adenoma) and one malignant tumor (adenocarcinoma). The increased incidence for lung tumors is associated with the prolonged respiratory irritation and the concurrent accumulation of yellow material in the lung that was observed throughout the study.

First Aid (Pictograms)



4. First Aid Measures

Eye - Flush with water and/or 1% boric acid, lifting upper and lower lids occasionally for at least 30 minutes. Seek medical attention.

Skin - Wash with soap and water for at least 15 minutes. Remove contaminated clothing and launder before reuse.

Ingestion - Do not give liquid if victim is unconscious or very drowsy. Otherwise, give no more than two glasses of water or milk and induce vomiting by administering two (2) tablespoons of ipecac syrup or by touching finger to back of victim's throat. Keep victim's head below hips while vomiting. Seek medical attention.

Inhalation - Remove victim to fresh air. If difficulty with breathing, administer oxygen. Seek immediate medical attention.

Fire Fighting (Pictograms)



5. Fire Fighting Measures

Flash Point: 230 °F

Flash Point Method: SETAFLASH CC

Autoignition Point: N/D °F

Lower Explosive Limit: N/D

Upper Explosive Limit: N/D

Fire And Explosion Hazards - If water is used, use very large quantities. A very vigorous reaction may take place between water and the hot product. Water contamination will produce gas (carbon dioxide). Do not reseal contaminated containers as pressure buildup may rupture them.

Extinguishing Media - Carbon dioxide, foam, dry chemical or water spray.

Fire Fighting Instructions - Self-contained respirator equipment and full protective clothing are required when smoke and fumes are generated.

Flammable Limits: Acrid smoke/fumes



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6. Accidental Release Measures

Wear skin, eye and respiratory protection during cleanup. All operations should be performed by personnel familiar with the hazards of the chemicals used.

Small Spills: Wipe with rag.

Larger Spills: Soak up material with absorbent and shovel into waste container. Cover but do not seal container and then remove from work area. Make decontamination solution of .5% liquid detergent and 5% ammonium hydroxide or 7% sodium carbonate in water. Carbon dioxide will form, leaving insoluble polymer material. Wash residue into sewer, observing local regulations of discharging insoluble polymer materials.

Handling & Storage (Pictograms)



7. Handling And Storage

Handling And Storage Precautions - Avoid breathing vapors. Use with good ventilation.

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

Storage Precautions - Store in cool dry place in closed containers. Store away from light and between 60 degrees and 95 degrees F.

Work/Hygienic Practices - Wash hands thoroughly with soap and water after every use. Minimize exposure as a good hygienic practice.

Protective Clothing (Pictograms)



8. Exposure Controls/Personal Protection

Engineering Controls - **Ventilation** - Use good mechanical, ventilation and local exhaust.

Eye/Face Protection - Chemical-light goggles.

Skin Protection - Selection of specific items such as gloves, boots and apron will depend on the operation. Butyl or neoprene rubber garments have good resistance to permeation by MDI. Clothing constructed of polyethylene, latex rubber or PVC has limited resistance to permeation by MDI. Wash contaminated clothing before reuse.

Respiratory Protection - When material is sprayed or heated and airborne concentrations exceed or are expected to exceed the TLV, use MSHA/NIOSH approved positive pressure supplied air respirator with full face piece or an air supplied hood. For emergencies, use a positive pressure self-contained breathing apparatus. Cartridge type air-purifying respirators are not approved against isocyanates.

Ingredient(s) - Exposure Limits

DIPHENYLMETHANE 4,4' DISOCYANATA, MDI

TLV .005 ppm/8 hour TWA ; OSHA PEL - .02 ppm/ceiling

NO ACGIH or OSHA PEL have been assigned to this material. For MDI, the TLV is .005 ppm/8 hour TWA and PEL is .02 ppm, ceiling. NIOSH recommends .005 ppm TWA and .02 ppm STEL. These control limits do not apply to previously sensitized individuals or persons with existing chronic respiratory disease. Sensitized individuals should be removed from any further exposure.

9. Physical And Chemical Properties

Appearance - White. When mixed with "Side B", concrete gray.

Odor - Mild



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9. Physical And Chemical Properties - Continued

Chemical Type: Mixture
Physical State: Liquid
Boiling Point: >400 °F
Specific Gravity: 1.1(water=1)
Percent Volatiles: NIL
Vapor Pressure: N/D @ 20 degree C
Vapor Density: N/D
pH Factor: N/D
Solubility: Minimal in water
Evaporation Rate: N/D

10. Stability And Reactivity

Stability: Stable
Hazardous Polymerization: May occur if not handled per instructions

Conditions To Avoid (Stability) - This product must be mixed with another component or water (moisture) to react. Excessive heat, fumes and foam generation can occur if improperly handled. Not sensitive to mechanical impact.

Incompatible Materials - Strong acids or bases. Amines, mercaptans, polyols, water and metal compounds may initiate possible hazardous reactions.

Hazardous Decomposition Products - Carbon monoxide and dioxide, nitrogen oxides, ammonia. Trace amounts of hydrogen cyanide.

11. Toxicological Information

Eye Effects - (Rabbits) Mild Irritation.

Skin Effects - (Rabbits) Moderate irritation.

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

Chronic/Carcinogenicity - None of the components of this material are listed as carcinogens by NTP, IARC or OSHA. LD SOs provided are the lowest values for the type of bisphenol A diglycidal ether resins used.

12. Ecological Information

No Data Available...

13. Disposal Considerations

Dispose of 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

State Regulations - In order to comply with California Proposition 65, we feel obligated to advise that some of our products may conceivably contain trace contaminants of some of the listed chemicals. While not necessarily added to our products as ingredients, some listed chemicals may be present in the raw materials as received from suppliers and over which we have no control. Therefore, even though some of the listed substances may not represent a significant




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Quick Set Surface Seal & Peel (Side A)

15. Regulatory Information - Continued

risk as defined by the regulations, in order to comply with California law, we feel obligated to make the following statement:

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

<u>NFPA</u>	<u>HMIS</u>								
	<table border="1"><tr><td>HEALTH</td><td>2</td></tr><tr><td>FLAMMABILITY</td><td>1</td></tr><tr><td>REACTIVITY</td><td>2</td></tr><tr><td>PERSONAL PROTECTION</td><td>J</td></tr></table>	HEALTH	2	FLAMMABILITY	1	REACTIVITY	2	PERSONAL PROTECTION	J
HEALTH	2								
FLAMMABILITY	1								
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PERSONAL PROTECTION	J								

16. Other Information

Revision/Preparer Information

This MSDS Supercedes A Previous MSDS Dated: 10/07/2003

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).

Mar-flex Building Solutions

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Quick Set Surface Seal & Peel (Side B)

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Issue Date: 12/21/2011

Product Name: Quick Set Surface Seal & Peel (Side B)
 Chemical Name: Polyurea Paste Adhesive
 CAS Number: Not Established
 Chemical Family: Amine Blend
 MSDS Number: 109
 Product Code: AI-68165

Product/Material Uses - Used in conjunction with "Side A" to temporarily seal cracks and attach surface ports prior to crack injection repair. Easy to remove.

Product Identification Text - Side "B" of the 1:1 Cartridge

2. Composition/Information On Ingredients

Ingredient Name	CAS Number		Percent Of Total Weight
FLYCERYL-POLYOXYPROPYLENETRIAMINE	64852-22-8	<	5
N,N-DIALKYLDPHENYL METHANE	5285-60-9		30 - 35

Other ingredients are non-hazardous as defined in 29 CFR 1910-1200.

3. Hazards Identification

Primary Routes(s) Of Entry - Skin and inhalation.

Eye Hazards - Contact can cause severe burns, irritation, redness, tearing or blurred vision.

Skin Hazards - Short single exposure may cause moderate irritation to mild burn. Prolonged or repeated exposure may cause a severe burn. May result in an allergic reaction. Skin sensitizer. Draize skin score for 24 hour contact, 2.8.

Ingestion Hazards - Slightly toxic by ingestion. Oral LD (50) (rat), 1.4g/kg.

Inhalation Hazards - Due to low vapor pressure o this product, fumes will be minimal below 90 degrees F. At higher temperatures, fumes will be irritating.

First Aid (Pictograms)



4. First Aid Measures

Eye - Flush with water and/or 1% boric acid, lifting upper and lower lids occasionally for at least 30 minutes. Seek medical attention.



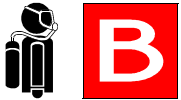
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4. First Aid Measures - Continued

Skin - Wash with soap and water for at least 15 minutes. Remove contaminated clothing and launder before reuse.
Ingestion - Do not give liquid if victim is unconscious or very drowsy. Otherwise, give no more than two glasses of water or milk and induce vomiting by administering two (2) tablespoons of ipecac syrup or by touching finger to back of victim's throat. Keep victim's head below hips while vomiting. Seek medical attention.
Inhalation - Remove victim to fresh air. If difficulty with breathing, administer oxygen. Seek immediate medical attention.

Fire Fighting (Pictograms)



5. Fire Fighting Measures

Flash Point: >200 °F
Flash Point Method: PMCC

Fire And Explosion Hazards - Fire may produce irritating and poisonous fumes such as carbon monoxide and nitrous oxides. Electrical grounding is not recommended.

Extinguishing Media - Carbon dioxide, foam, dry chemical and water fog.

Fire Fighting Instructions - Self-contained respirator equipment and full protective clothing are required when smoke and fumes are generated.

6. Accidental Release Measures

Ventilate area. Wear appropriate protective gear. Contain leak/spill. Salvage. Clean up residue with absorbent material. Wash down area with diluted

Handling & Storage (Pictograms)



7. Handling And Storage

Handling And Storage Precautions - Avoid breathing vapors. Use with good ventilation.

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

Storage Precautions - Store in cool dry place in closed containers. Store away from light and between 60 degrees and 95 degrees F.

Work/Hygienic Practices - Wash hands thoroughly with soap and water after every use. Minimize exposure as a good hygienic practice.

Protective Clothing (Pictograms)



8. Exposure Controls/Personal Protection

Engineering Controls - **Ventilation:** Use good mechanical, ventilation and local exhaust.

Eye/Face Protection - Use chemical goggles and face shield if splashing is anticipated. Wear globes.



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Quick Set Surface Seal & Peel (Side B)

8. Exposure Controls/Personal Protection - Continued

Skin Protection - Selection of specific items such as gloves, boots and apron will depend on the operation.

Respiratory Protection - Wear respirator protection whenever airborne concentration exceed TLV ceiling or TWA. Use MSHA/NIOSH approved respirators for listed hazard. Confined spaces, rooms or tanks are where concern for TLV's is especially important. Reference OSHA Regulations CFR 29 1910.134 for recommended respiratory protection.

9. Physical And Chemical Properties

Appearance - Black. When mixed with "Side B", concrete gray.

Odor - Ammoniacal

Chemical Type: Mixture

Physical State: Liquid

Boiling Point: >300 °F

Specific Gravity: 1.0

Percent Volatiles: Negligible

Vapor Pressure: @20 degrees C: <.1mm/Hg

Vapor Density: N/D

Solubility: Negligible in water

Evaporation Rate: N/D

N/D = Not Determined

10. Stability And Reactivity

Stability: Stable

Conditions To Avoid (Stability) - This product must be mixed with another component to react. Not sensitive to mechanical impact.

Incompatible Materials - Incompatible with strong oxidizing agents, acids, epoxy resins, isocyanates and organic peroxides. Could cause a violent reaction.

Hazardous Decomposition Products - Carbon monoxide and dioxide, nitrogen oxides, aldehydes and various hydrocarbons from incomplete combustion.

Conditions To Avoid (Polymerization) - Will not occur unless product is mixed with epoxy resins, isocyanates or urethane prepolymers.

11. Toxicological Information

No Data Available...

12. Ecological Information

No Data Available...

13. Disposal Considerations

Dispose of in accordance with Federal, State and Local regulations.

14. Transport Information

No Data Available...

15. Regulatory Information

No Data Available...



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16. Other Information

No Data Available...

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