MATERIAL SAFETY DATA SHEET

Quick Foam Broad Urethane

1. Product And Company Identification

Supplier
Mar-flex Waterproofing Products
6866 Chrisman Lane
Middletown, OH 45042 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 Products
6866 Chrisman Lane
Middletown, OH 45042 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: 09/24/2009

Product Name: Quick Foam Broad Urethane
Chemical Name: Polyurethane Foam
CAS Number: Not Established
Chemical Family: Polymeric Diphenylmethane Diisocyanate
MSDS Number: 107
Product Code: IA-68120

Synonyms
Aromatic Isocyanate

Product/Material Uses - Used in conjuction with added water to seal cracks that are 1/8" or wider which are actively leaking.
Product Identification Text - 1 Part Cartridge

2. Composition/Information On Ingredients

Ingredient Name	CAS Number		Percent Of Total Weight
4.4 Diphenylmethane Diisocyanate	101-68-8		

Percent of Total Weight is a Trade Secret

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 - Eye, Skin, Ingestion & Inhalation.
Eye Hazards - As a liquid or dust, may cause irritation, inflammation and/or damage to sensitive eye tissue. Symptoms include watering or discomfort of eyes. Corneal injury is unlikely.

3. Hazards Identification - Continued

Skin Hazards - No irritation is likely to develop following short contact periods with skin. Prolonged or repeated exposure can cause skin irritation, reddening, dermatitis and in some individuals, sensitization. Skin contact may result in allergic skin reactions or respiratory sensitization but is not expected to result in absorption or amounts sufficient to cause other adverse effects. May stain skin.
Ingestion Hazards - Single dose oral toxicity is considered to be extremely low. Can result in irritation and corrosive action in mouth, stomach tissue and digestive tract.
Inhalation Hazards - Persons with known respiratory and allergy problems must not be exposed to this product.
Chronic/Carcinogenicity Effects - **Chronic:** As a result of previous repeated overexposure or a single large dose, certain individuals develop isocyanate sensitization (chemical asthma) or tissue injury in the upper respiratory tract. Animal test indicate skin contact alone may also lead to allergic respiratory reaction. These effects may be permanent. Any person developing asthmatic reaction or other sensitization should be removed from further exposure.
Carcinogenicity: MDI and Polymeric MDI are not listed by the NTP, IARC or regulated by OSHA as carcinogens. Lung tumors have been observed in laboratory animals exposed to aerosol droplets of MDI/Polymeric MDI (6mg/m3) for their lifetime. Tumors occurred concurrently with respiratory irritation and lung injury. Current exposure guidelines are expected to protect against these effect.
Signs And Symptoms - Symptons may include coughing, dryness of throat, headache, nausea, difficulty breathing and a feeling of tightness in the chest. Effects may be delayed.
Conditions Aggravated By Exposure - Respiratory sensitization with asthma-like symptoms may occur in a susceptible individual. MDI concentration below the exposure guideline may cause allergic respiratory reactions in individuals already sensitized. Excessive exposure may cause irritation of the eyes, upper respiratory tract and lungs.
Conditions Aggravated By Overexposure - Severe overexposure may lead to pulminary edema. Impaired lung function (decreased ventilators capacity) has been associated with over exposure to isocyanate.

First Aid (Pictograms)

4. First Aid Measures

Eye - Flush eyes with plenty of water for at least 15 minutes. Materials containing MDI may react with the moisture of the eye forming a thick material that may be difficult to wash from the eyes. Seek medical attention.
Skin - Wash off in flowing water or shower. Remove and wash contaminated clothing and discard contaminated shoes. Seek medical attention if redness, itching or a burning sensation develops or persists after the area is washed.
Ingestion - If swallowed, drink 1 or 2 glasses of water or milk. Do not induce vomiting unless directed to do so by medical personnel. If gastrointestinal symptoms develop, consult medical personnel. (Never give anything by mouth to an unconscious person).
Inhalation - Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, oxygen should be administered by qualified personnel. Call a physician or transport to a medical facility immediately.
Note To Physician - **Eyes:** Stain for evidence of corneal injury. If cornea is burned, instill antibiotic steroid preparation frequently. Workplace vapors have produced reversible corneal epithelial edema impairing vision.
Skin: This material is a known skin sensitizer. Treat symptomatically as for contact dermatitis or thermal burns. If burned, treat as thermal burn.
Ingestion: Treat symptomatically. There is no specific antidote. Inducing vomiting is contraindicated of the irritating nature of this product.

4. First Aid Measures - Continued

Fire Fighting (Pictograms)

5. Fire Fighting Measures

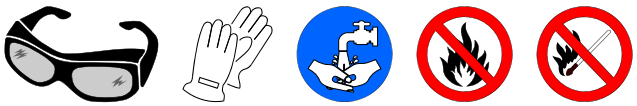
Flash Point: 398 °F
Flash Point Method: PMCC
Lower Explosive Limit: N.D.
Upper Explosive Limit: N.D.

Fire And Explosion Hazards - Decomposition and combustion products may be toxic.
Extinguishing Media - Dry chemical, carbon dioxide foam, water spray for large fires.
Fire Fighting Instructions - Wear self-contained breathing apparatus and full protective clothing when smoke and fumes are generated.

6. Accidental Release Measures

Evacuate spill area. Use adequate ventilation and appropriate personal protective equipment.
Small Spills: Cover the area with an inert absorbent such as clay or vermiculite and transfer to metal waste containers. Saturate spill area with water or decontamination solution(See below). Do not seal the container with the isocyanate mixture. **Note:** Isocyanate will react with water and generate carbon dioxide. This could result in the rupture of any closed container.
Large Spills: Liquid may be transferred directly to drums for disposal.
Clean Up: The area should then be flushed with a decontamination solution. The decontamination solution is a 5-10% mixture of sodium carbonate and .5% liquid detergent in water solution or a 3% concentrated ammonium hydroxide and .5% liquid detergent in water. Use 10 parts decontamination solution to 1 part spilled material. If the ammonium hydroxide solution is used, ammonia will be evolved as a vapor. Use caution to avoid exposure to high concentrations of ammonia. Allow to stand for 48 hours letting evolved carbon dioxide to escape.

Handling & Storage (Pictograms)



7. Handling And Storage

Handling And Storage Precautions - **Storage**: When stored between 60 degrees F and 85 degrees F (15 and 30 degree C) in sealed containers, typical shelf life is six months or more from the date of manufacture. Consult technical data sheet for shelf life requirements affecting performance quality. Should freezing occur, the material must be thawed thoroughly and mixed until uniform. Open containers must be handled properly to prevent moisture contamination.
Heating: Use personal protective equipment when transferring material to or from drums, totes or other containers. Safety glasses and gloves are the minimum protection. Additional precautions must be used when splash hazards are present. The reaction of polyols and isocyanates generate heat. Contact of the reacting materials with skin or eyes can cause sever burns and may be difficult to remove from the affected areas. Immediately wash affected areas with plenty of water and seek medical attention. In addition, such contact increases the risk of exposure to isocyanate vapors. Do not smoke or use naked lights, open flames, space heaters or other ignition source near pouring or frothing operations.
Storage Precautions - **DO NOT ALLOW TO FREEZE.**

Protective Clothing (Pictograms)

8. Exposure Controls/Personal Protection

Engineering Controls - **Exposure:** MDI contains reactive isocyanate groups. Use with adequate ventilation to keep airborne isocyanate level below TLV or 0.005 ppm TWA (ACGIH) and PEL 0.02 ppm ceiling (OSHA). These control limits do not apply to previously sensitized individuals, or to individuals with existing respiratory disease, such as bronchitis, emphysema or asthma. Respiratory protection may be needed where material is heated, sprayed or used in confined space, or if TLV is exceeded. Never try to detect MDI vapor by odor. Persons with known respiratory or allergic problems must not be exposed to this product.
Ventilation: MDI has a very low vapor pressure at room temperature. General/local ventilation typically controls exposure levels very adequately. More aggressive engineering controls or personal protective equipment may be required in some applications such as heating. Monitoring is required to determine engineering controls.
Eye/Face Protection - Chemical splash goggles, safety glasses or a full face shield must be used consistent with splash hazard present. If vapor exposure causes eye discomfort, use a full-face piece respirator or air supplied hood.
Skin Protection - Wear clothing and gloves impervious to MDI under conditions of use. Materials may include butyl rubber, nitrile rubber, neoprene and Saranex coated Tyvek.
Respiratory Protection - A supplied air, full face piece, positive pressure or continuous flow respirator or supplied air hood is required when airborne concentrations are unknown or exceed threshold values. A positive pressure self contained breathing apparatus can be used in emergencies or other unusual situations. All equipment must be NIOSH/MSHA approved and maintained. Air purifying (cartridge type) respirator are not approved for protection against isocyanates.

Ingredient(s) - Exposure Limits
4.4 Diphenylmethane Diisocyanate
ACGIH TLW - 0.005ppm ; OSHA PEL - 0.02

9. Physical And Chemical Properties

Appearance - Dark brown liquid
Odor - Mild odor

Chemical Type: Mixture
Physical State: Liquid
Boiling Point: 406 (5 mm Hg) °F
Packing Density: 10.31 lb/gal
Vapor Pressure: <10-5 (NW HG)
Vapor Density: S.5 (MDI) AIR=1
Solubility: Resin reacts slowly to liberate CO2 gas
Evaporation Rate: Slower than ethyl ether

10. Stability And Reactivity

Stability: Stable under normal conditions.
Hazardous Polymerization: May occur with incompatible reactants.

Conditions To Avoid (Stability) - Should be handled and stored in a way to avoid exposure to many common substances, including water and moisture. Avoid extended exposure 110 degree F (45 degree C).
Incompatible Materials - Reacts with water, acids, bases, alcohols & metal compounds.
Conditions To Avoid (Polymerization) - Incompatible reactants especially strong bases, water or temperatures over 320 degree F (160 degrees C). Possible evolution of carbon dioxide gas from overheating or exposure to contaminates

10. Stability And Reactivity - Continued

may rupture closed containers.
The reaction with water is very slow under 102 degrees F, but is accelerated at higher temperatures and in the presence of alkalis, tertiary amines and metal compounds. Some reactions can be vigorous and even violent.

11. Toxicological Information

Ingredient(s) - Carginogenicity
4.4 Diphenylmethane Diisocyanate
OSHA Regulated Carcinogen

12. Ecological Information

No Data Available...

13. Disposal Considerations

Any disposal practice must be in compliance with all federal, state and local laws and regulations. Chemical additions, processing, storage, or otherwise altering this material may make the waste management information presented in this MSDS incomplete, inaccurate or otherwise inappropriate. Waste characterization and disposal compliance is the responsibility solely of the party generating the waste or deciding to discard or dispose of the material.

Container Disposal: Drums/containers must be thoroughly drained to process or storage vessels before removal to an appropriate area for subsequent decontamination. Drums/containers must be decontaminated in properly ventilated areas by personnel protected from the inhalation of isocyanate vapors. Spray or pour 1 to 5 gallons of decontamination solution into the drum making sure the walls are well rinsed. Let the drum container soak unsealed for 48 hours. Pour out the decontamination solution and triple rinse the empty container. Puncture or otherwise destroy the rinsed container before disposal. Do not heat or cut empty containers with electric or gas torch.
RCRA Information - MDI is not a hazardous waste. However, under RCRA, it is the responsibility of the user of products to determine, at any time of disposal, whether a product meets any of the criteria for hazardous water.

Refer to RCRA 40 - CFR 261 and/or any other appropriate Federal, State or Local requirements for proper classification information.

14. Transport Information

Proper Shipping Name - Caulking Compound

DOT Shipping Label
Caulking Compound.NOI.In Boxs (I-149610)

Freight Class
55
Additional Shipping Paper Description - **IMO** (Ocean): Not regulated
ICAO (Air): Not regulated

15. Regulatory Information

U.S. Regulatory Information - **TSCA Status:** On the TSCA inventory
CERCLA Reportable Quantity: 4,4, Diphenylmethane Diisocyanate = 5,000 lbs

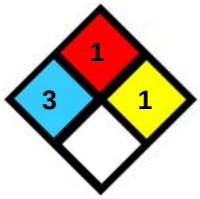
SARA Hazard Classes
Acute Health Hazard; Chronic Health Hazard; Reactivity Hazard

SARA Title III - Section 313 Form "R"/TRI Reportable Chemical

15. Regulatory Information - Continued

SARA Hazard Classes - Continued
Ingredient(s) - U.S. Regulatory Information
4.4 Diphenylmethane Diisocyanate
SARA Title III - Section 313 Form "R"/TRI Reportable Chemical

NFPA



HMIS

HEALTH	3
FLAMMABILITY	1
REACTIVITY	1
PERSONAL PROTECTION	J

16. Other Information

Revision/Preparer Information
This MSDS Supercedes A Previous MSDS Dated: 09/10/2003

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.

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