

# SAFETY DATA SHEET

---

## SECTION 1) CHEMICAL PRODUCT AND SUPPLIER'S IDENTIFICATION

---

**Product ID:** IA-68120  
**Product Name:** Quick Foam Broad Urethane  
**Revision Date:** May 01, 2015 **Date Printed:** Feb 09, 2017  
**Version:** 1.0 **Supersedes Date:** N.A.  
**Manufacturer's Name:** Mar-flex Waterproofing & Building Products  
**Address:** 500 Business Parkway Carlisle, OH, US, 45005  
**Emergency Phone:** Chem-Trec: 1-800-424-9300  
**Information Phone Number:** 513-422-7285  
**Fax:** 513-422-7282  
**Product/Recommended Uses:**

---

## SECTION 2) HAZARDS IDENTIFICATION

---

### Classification:

Specific Target Organ Toxicity - Single Exposure (Respiratory Tract Irritation) - Category 3  
Specific Target Organ Toxicity - Repeated Exposure - Category 2  
Skin Irritation - Category 2  
Respiratory Sensitizer (Solid/Liquid) - Category 1  
Skin Sensitizer - Category 1  
Carcinogenicity - Category 2  
Eye Irritation - Category 2  
Acute toxicity Oral - Category 5

### Pictograms:



### Signal Word:

Danger

### Hazardous Statements - Health:

May cause respiratory irritation  
May cause damage to organs through prolonged or repeated exposure.  
Causes skin irritation  
May cause allergy or asthma symptoms or breathing difficulties if inhaled  
May cause an allergic skin reaction  
Suspected of causing cancer.  
Causes serious eye irritation  
May be harmful if swallowed

### Precautionary Statements - General:

If medical advice is needed, have product container or label at hand.  
Keep out of reach of children.  
Read label before use.

---

**Precautionary Statements - Prevention:**

- Use only outdoors or in a well-ventilated area.
- Keep container tightly closed.
- Do not breathe dust/fume/gas/mist/vapors/spray.
- Wash thoroughly after handling.
- Wear protective gloves/protective clothing/eye protection/face protection.
- [In case of inadequate ventilation] wear respiratory protection.
- Contaminated work clothing should not be allowed out of the workplace.
- Obtain special instructions before use.
- Do not handle until all safety precautions have been read and understood.

**Precautionary Statements - Response:**

- IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- Call a POISON CENTER/doctor, if you feel unwell.
- IF ON SKIN: Wash with plenty of water.
- Specific treatment (see First-aid measures on this SDS).
- If skin irritation occurs: Get medical advice/attention.
- Take off contaminated clothing. And wash it before reuse.
- If experiencing respiratory symptoms: Call a POISON CENTER/doctor.
- If skin irritation or a rash occurs: Get medical advice/attention.
- IF exposed or concerned: Get medical advice/attention.
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- If eye irritation persists: Get medical advice/attention.

**Precautionary Statements - Storage:**

- Store in a well-ventilated place. Store locked up.

**Precautionary Statements - Disposal:**

- Dispose of contents/container to disposal recycling center. Waste management should be in full compliance with federal, state and local laws.

**Hazards Not Otherwise Classified (HNOC):**

- Severe overexposure may lead to pulmonary edema.
- Certain individuals may develop isocyanine sensitization (chemical asthma).

**Additional hazard information:**

- Persons With Known Respiratory or Allergy Problems Must Not Be Exposed to This Product.

---

**SECTION 3) COMPOSITION / INFORMATION ON INGREDIENTS**

---

CAS	Chemical Name	% By Weight
0000101-68-8	4,4'-METHYLENEDIPHENYL DIISOCYANATE (MDI)	0.0% - 100%

Specific chemical identity and/or exact percentage (concentration) of the composition has been withheld to protect confidentiality.

---

**SECTION 4) FIRST-AID MEASURES**

---

**Note to physician:**

- Eyes: Strain 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.
- Ingestion: Treat symptomatically. There is no specific antidote. Inducing vomiting is contraindicated of the irritating nature of this product.

**Inhalation:**

Remove source of exposure or move person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor. If breathing is difficult, trained personnel should administer emergency oxygen if advised to do so by the POISON CENTER/doctor. Avoid mouth-to-mouth contact by using a barrier device.

**Eye Contact:**

Remove source of exposure or move person to fresh air. Rinse eyes cautiously with lukewarm, gently flowing water for several minutes, while holding the eyelids open. Remove contact lenses, if present and easy to do. Continue rinsing for a duration of 15-20 minutes. Take care not to rinse contaminated water into the unaffected eye or onto the face. If eye irritation persists: Get medical advice/attention.

**Skin Contact:**

Take off contaminated clothing, shoes and leather goods (e.g. watchbands, belts). Wash with plenty of lukewarm, gently flowing water for 15-20 minutes. If skin irritation occurs or you feel unwell: Get medical advice/attention. Wash contaminated clothing before re-use.

**Ingestion:**

Rinse mouth. Drink 1 or 2 glasses of water or milk. Do NOT induce vomiting. If vomiting occurs naturally, lie on your side, in the recovery position. If exposed, concerned or if you feel unwell: get medical advice/attention.

**Most Important Symptoms and Effects, Both Acute and Delayed:**

Prolonged contact with skin can cause reddening, swelling, rash, scaling or blistering. In those who have developed a skin sensitization, these symptoms can develop as a result of a very small amount of liquid material or vapors.

Liquid, vapors, or mist are irritating to the eyes and can cause tearing, stinging, burning, reddening or swelling. If left untreated, corneal damage can occur and injury is slow to heal. Damage is usually reversible. Materials containing MDI may react with the moisture of the eye forming a thick material that may be difficult to wash from the eyes.

Ingestion could result in irritation and corrosive action in the mouth, stomach tissue and digestive tract. These irritations would be followed by vomiting and cramps.

As a result of previous repeated overexposure or a single large dose, certain individuals develop isocyanine sensitization (chemical asthma) or tissue injury in the upper respiratory tract. Animal tests 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.

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. Excessive exposure may cause irritation of the eyes, upper respiratory tract and lungs. Severe overexposure may lead to pulmonary edema. Symptoms of pulmonary edema can be delayed up to 48 hours after exposure. Respiratory sensitization with asthma like symptoms may occur in susceptible individuals. MDI concentration below the exposure guidelines may cause allergic respiratory reactions in individuals already sensitized. Symptoms may include coughing, dryness of throat, headache, nausea, difficulty breathing and feeling of tightness in the chest. Effects may be delayed. Impaired lung function (decreased ventilators capacity) has been associated with overexposure to isocyanate.

This material is designed and intended to be pumped, not sprayed. MDI becomes more hazardous when atomized(sprayed).

**Indication of Any Immediate Medical Attention and Special Treatment Needed:**

No data available.

---

**SECTION 5) FIRE-FIGHTING MEASURES**

---

**Suitable Extinguishing Media:**

Dry chemical, foam, carbon dioxide water spray or fog is recommended. Carbon dioxide can displace oxygen. Use caution when applying carbon dioxide in confined spaces. Simultaneous use of foam and water on the same surface is to be avoided as water destroys the foam.

**Unsuitable Extinguishing Media:**

Do not use direct water stream. Since this may cause fire to spread.

**Specific Hazards in Case of Fire:**

Burning produces noxious and toxic fumes.

**Fire-fighting Procedures:**

Isolate immediate hazard area and keep unauthorized personnel out. Stop spill/release if it can be done safely. Move undamaged containers from immediate hazard area if it can be done safely. Water spray may be useful in minimizing or dispersing vapors and to protect personnel. Caution should be exercised when using water or foam as frothing may occur, especially if sprayed into containers of hot, burning liquid.

Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

**Special Protective Actions:**

Wear NIOSH approved, protective pressure self-contained breathing apparatus (SCBA) and full turnout gear.

---

**SECTION 6) ACCIDENTAL RELEASE MEASURES**

---

**Emergency Procedure:**

ELIMINATE all ignition sources (no smokes, flares, sparks or flames in immediate area).

Isolate hazard area and keep unnecessary people away. Notify authorities if any exposure to the general public or the environment occurs or is likely to occur.

Do not touch or walk through spilled material.

If spilled material is cleaned up using a regulated solvent, the resulting mixture may be regulated.

#### **Recommended Equipment:**

Positive pressure, full-facepiece self-contained breathing apparatus (SCBA), or positive pressure supplied air respirator with escape SCBA (NIOSH approved).

#### **Personal Precautions:**

Avoid breathing vapor. Avoid contact with skin, eye or clothing. Never try to detect MDI vapor by odor. Do not touch damaged containers or spilled materials unless wearing appropriate protective clothing.

#### **Environmental Precautions:**

Stop spill/release if it can be done safely. Prevent spilled material from entering sewers, storm drains, other unauthorized drainage systems and natural waterways by using sand, earth, or other appropriate barriers.

#### **Methods and Materials for Containment and Cleaning up:**

Contain and collect spilled materials with non-combustible, absorbent material and place in a container for disposal according to local, state and federal laws and regulations. Saturate with water or decontamination solution, but do not seal the container with isocyanate mixture. Dispose via a licensed waster disposal contractor. Contaminated absorbent material may pose the same physical hazards as the product.

The area should 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.

Note: Isocyanate will react with water and generate carbon dioxide. This could result in the rupture of any closed container.

---

## **SECTION 7) HANDLING AND STORAGE**

---

#### **General:**

Wash hands after use.

Do not get in eyes, on skin or on clothing.

Do not breathe vapors or mists.

Use good personal hygiene practices.

Eating, drinking and smoking in work areas is prohibited.

Remove contaminated clothing and protective equipment before entering eating areas.

Heating: Use personal protective equipment when transferring material to or from drums, totes or other containers.

#### **Ventilation Requirements:**

Use only with adequate ventilation to control air contaminants to their exposure limits. The use of local ventilation is recommended to control emissions near the source.

#### **Storage Room Requirements:**

Keep container(s) tightly closed and properly labeled. Store in cool, dry, well-ventilated areas away from heat, naked lights, direct sunlight, strong oxidizers and any incompatibilities. Store in approved containers and protect against physical damage. Keep containers securely sealed when not in use. Indoor storage should meet OSHA standards and appropriate fire codes. Containers that have been opened must be carefully resealed to prevent leakage. Empty container can retain residue and may be dangerous.

When stored between 60°F and 85°F (15° and 30°C) in sealed containers, typical shelf life is 6 months or more from the date of manufacture. Consult technical data sheet for shelf life requirements affecting performance quality.

Protect from freezing. Should freezing occur, the material must be thawed thoroughly and mixed until uniform.

Opened containers must be handled properly to prevent moisture contamination.

---

## **SECTION 8) EXPOSURE CONTROLS/PERSONAL PROTECTION**

---

#### **Eye protection:**

Wear eye protection with side shields or goggles. Wear indirect-vent, impact and splash resistant goggles when working with liquids. If additional protection is needed for entire face, use in combination with a face shield.

#### **Skin Protection:**

Use of gloves approved to relevant standards made from the following materials may provide suitable chemical protection: PVC, neoprene or nitrile rubber gloves. Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, glove thickness, dexterity. Always seek advice from glove suppliers. Contaminated gloves should be replaced. Use of an apron and boots of chemically impervious materials such as neoprene or nitrile rubber is recommended to avoid skin sensitization. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

### Respiratory Protection:

A supplied air, full face piece, positive pressure or continuous flow respirator or a 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/OSHA approved and maintained. Air purifying (cartridge type) respirators are not approved for protections against isocyanates.

### Appropriate Engineering Controls:

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value.

Chemical Name	OSHA STEL (ppm)	OSHA TWA (mg/m3)	OSHA TWA (ppm)	OSHA STEL (mg/m3)	OSHA Carcinogen	OSHA Skin designation	OSHA Tables (Z1, Z2, Z3)	NIOSH TWA (mg/m3)	NIOSH TWA (ppm)	NIOSH STEL (mg/m3)	NIOSH STEL (ppm)	NIOSH Carcinogen
4,4'-METHYLENEDIPHENYL DIISOCYANATE (MDI)		0.2 ceiling	0.02 ceiling				1	0.050	0.005			

Chemical Name	ACGIH TWA (mg/m3)	ACGIH TWA (ppm)	ACGIH STEL (mg/m3)	ACGIH STEL (ppm)	ACGIH TLV Basis	ACGIH Carcinogen	ACGIH Notations
4,4'-METHYLENEDIPHENYL DIISOCYANATE (MDI)	0.051	0.005			Resp sens		

resp - respiratory , sens - sensitization

---

## SECTION 9) PHYSICAL AND CHEMICAL PROPERTIES

---

### Physical and Chemical Properties

Density	10.31 lb/gal
% Solids By Weight	N/A
Density VOC	10.31 lb/gal
% VOC	100.00%
Specific Gravity	1.24
<hr/>	
Appearance	Dark Brown
Odor Threshold	N/A
Odor Description	Mild
pH	N/A
Water Solubility	Resin reacts slowly to liberate CO2 gas
Flammability	N/A
Flash Point Symbol	N/A
Flash Point	398°F (PMCC)
Viscosity	N/A
Lower Explosion Level	N/A
Upper Explosion Level	N/A
Vapor Pressure	< 10 - 5 (NW HG)
Vapor Density	1.5
Freezing Point	N/A
Melting Point	N/A
Low Boiling Point	406 °F
High Boiling Point	N/A
Auto Ignition Temp	N.A.
Decomposition Pt	N/A
Evaporation Rate	Slower than ethyl ether

---

**SECTION 10) STABILITY AND REACTIVITY**

---

**Stability:**

The product is stable under normal storage conditions.

**Conditions to Avoid:**

Avoid heat, sparks, flame, high temperature, freezing and contact with incompatible materials.

**Hazardous Reactions/Polymerization:**

Reacts with incompatible materials. The reaction with water is very slow under 120°F (50°C), but is accelerated at higher temperatures and in the presence of alkalis, tertiary amines and metal compounds. Some reactions can be vigorous or even violent.

May polymerize with incompatible reactants especially strong bases, water or temperatures over 320°F (160°C). Possible evolution of carbon dioxide gas from overheating or exposure to contaminants may rupture closed containers.

**Incompatible Materials:**

Water, acids, bases, alcohols, metal compounds.

**Hazardous Decomposition Products:**

No data available.

---

**SECTION 11) TOXICOLOGICAL INFORMATION**

---

**Likely Route of Exposure:**

Inhalation, ingestion, skin absorption, eye contact.

**Skin Corrosion/Irritation:**

Causes skin irritation

**Serious Eye Damage/Irritation:**

Causes serious eye irritation

**Respiratory/Skin Sensitization:**

May cause allergy or asthma symptoms or breathing difficulties if inhaled

May cause an allergic skin reaction

**Germ Cell Mutagenicity:**

No data available

**Carcinogenicity:**

Suspected of causing cancer.

**Reproductive Toxicity:**

No data available

**Specific Target Organ Toxicity - Single Exposure:**

May cause respiratory irritation

**Specific Target Organ Toxicity - Repeated Exposure:**

May cause damage to organs through prolonged or repeated exposure.

**Aspiration Hazard:**

No data available

**Acute Toxicity:**

No data available.

0000101-68-8            4,4'-METHYLENEDIPHENYL DIISOCYANATE (MDI)

LC50 (rat): 369-490 mg/m<sup>3</sup> (aerosol) (4-hour exposure) (1)

LC50 (rat): 178 mg/m<sup>3</sup> (17.4 ppm) (duration of exposure not reported) (2)

LD50 (oral, rat): greater than 10,000 mg/kg (1,2)

LD50 (dermal, rabbit): greater than 10,000 mg/kg (1)

LD50 (oral, mouse): 2,200 mg/kg (3)

---

## SECTION 12) ECOLOGICAL INFORMATION

---

**Toxicity:**

No data available

**Persistence and Degradability:**

No data available.

**Bio-accumulative Potential:**

No data available.

**Mobility in Soil:**

No data available.

**Other Adverse Effects:**

No data available.

---

## SECTION 13) DISPOSAL CONSIDERATIONS

---

**Waste Disposal:**

Under RCRA it is the responsibility of the user of the product to determine at the time of disposal whether the product meets RCRA criteria for hazardous waste. Waste management should be in full compliance with federal, state and local laws.

The generation of waste should be avoided or minimized whenever possible. Chemical waste, even small quantities, should never be poured down drains, sewers or waterways.

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 rise the empty container. Puncture or otherwise destroy the rinsed container before disposal. See Section 6 for decontamination solution.

Empty Containers retain product residue which may exhibit hazards of material, therefore do not pressurize, cut, glaze, weld or use for any other purposes. Return drums to reclamation centers for proper cleaning and reuse.

Chemical additions, processing, storage, or otherwise altering this material may make the waste management information presented in this SDS 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.

---

## SECTION 14) TRANSPORT INFORMATION

---

**U.S. DOT Information:**

UN number: Not Regulated  
Proper shipping name: N/A (N/A)  
Hazard class: N/A  
Packaging group: N/A  
Hazardous substance (RQ): No data available  
Toxic-Inhalation Hazard: No data available  
Marine Pollutant: No data available  
Note / Special Provision: No data available

**IMDG Information:**

UN number: Not Regulated  
Proper shipping name: N/A (N/A)  
Hazard class: N/A  
Packaging group: N/A  
Marine Pollutant: No data available  
Note / Special Provision: No data available

**IATA Information:**

UN number: Not Regulated  
Hazard class: N/A  
Packaging group: N/A  
Proper shipping name: N/A (N/A)  
Note / Special Provision: No data available

## SECTION 15) REGULATORY INFORMATION

CAS	Chemical Name	% By Weight	Regulation List
0000101-68-8	4,4'-METHYLENEDIPHENYL DIISOCYANATE (MDI)	0.0% - 100%	CERCLA,SARA312,VOC,IARCCarcinogen,TSCA

## SECTION 16) OTHER INFORMATION

### Glossary:

ACGIH- American Conference of Governmental Industrial Hygienists; ANSI- American National Standards Institute; Canadian TDG Canadian Transportation of Dangerous Goods; CAS- Chemical Abstract Service; Chemtrec- Chemical Transportation Emergency Center (US); CHIP- Chemical Hazard Information and Packaging; DSL- Domestic Substances List; EC- Equivalent Concentration; EH40 (UK)- ESE Guidance Note EH40 Occupational Exposure Limits; EPCRA- Emergency Planning and Community Right-To-Know Act; ESL- Effects screening levels; HMIS- Hazardous Material Information Service; LC- Lethal Concentration; LD- Lethal Dose; NFPA- National Fire Protection Association; OEL- Occupational Exposure Limits; OSHA- Occupational Safety and Health Administration, US Department of Labor; PEL- Permissible Exposure Limit; SARA (Title III)- Superfund Amendments and Reauthorization Act; SARA 313- Superfund Amendments and Reauthorization Act, Section 313; SCBA- Self-Contained Breathing Apparatus; STEL- Short Term Exposure Limit; TCEQ- Texas Commission on Environmental Quality; TLV- Threshold Limit Value; TSCA- Toxic Substances Control Act Public Law 94-469; TWA- Time Weighted Value; US DOT- US Department of Transportation; WHMIS- Workplace Hazardous Materials Information System.

### HMIS

Health	* 3
FLAMMABILITY	1
Physical Hazard	1
Personal Protection	J

(\*) - Chronic effects

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks

### Version 1.0:

Revision Date: May 01, 2015

First Edition.

## DISCLAIMER

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist. 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 this product may substantially alter the composition and hazards of the product. Since conditions of use are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information.