SECTION 1) CHEMICAL PRODUCT AND SUPPLIER'S IDENTIFICATION

Product ID: CETS-0475 / 0675 / 1275 / 1875 / 2475 / 3675
Product Name: ArmorFlash
Revision Date: Sep 23, 2016
Date Printed: Nov 11, 2016
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

SECTION 2) HAZARDS IDENTIFICATION

Classification:
- Specific Target Organ Toxicity - Repeated Exposure - Category 2
- Carcinogenicity - Category 1B

Pictograms:

Signal Word:
Danger

Hazardous Statements - Health:
- May cause damage to organs through prolonged or repeated exposure.
- May cause cancer.

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:
- Do not breathe dust/fume/gas/mist/vapors/spray.
- Obtain special instructions before use.
- Do not handle until all safety precautions have been read and understood.
- Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary Statements - Response:
- Get Medical advice/attention if you feel unwell.
- IF exposed or concerned: Get medical advice/attention.

Precautionary Statements - Storage:
- Store locked up.
- Keep container tightly closed.
SECTION 3) COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>CAS</th>
<th>Chemical Name</th>
<th>% By Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>0008052-42-4</td>
<td>BITUMENS</td>
<td>60% - 70%</td>
</tr>
<tr>
<td>0014808-60-7</td>
<td>SILICA, CRYSTALLINE</td>
<td>10% - 25%</td>
</tr>
<tr>
<td>0009003-55-8</td>
<td>Polymers</td>
<td>0.0% - 10%</td>
</tr>
<tr>
<td>0064742-65-0</td>
<td>MINERAL OIL, PETROLEUM DISTILLATES, SOLVENT-DEWAXED HEAVY PARAFFINIC</td>
<td>0.0% - 5%</td>
</tr>
</tbody>
</table>

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

SECTION 4) FIRST-AID MEASURES

Inhalation:  
Remove source of exposure or move person to fresh air and keep comfortable for breathing. If unwell, or exposed and concerned: Get medical advice/attention.

Eye Contact:  
If irritation occurs, cautiously rinse eyes with lukewarm, gently flowing water for 15-20 minutes, while holding the eyelids open. If eye irritation persists: Get medical advice/attention.

Skin Contact:  
Rinse/wash with lukewarm, gently flowing water and mild soap for 5 minutes or until product is removed. If skin irritation occurs or you feel unwell: Get medical advice/attention.

Ingestion:  
Rinse mouth. Call a POISON CENTER/doctor if you feel unwell or are exposed and concerned.

Most Important Symptoms and Effects, Both Acute and Delayed:  
Skin contact can cause skin irritation or redness. It may aggravate pre-existing skin conditions.

Indication of Any Immediate Medical Attention and Special Treatment Needed:  
Treat symptomatically.

SECTION 5) FIRE-FIGHTING MEASURES

Suitable Extinguishing Media:  
Dry chemical, foam, carbon dioxide. Carbon dioxide can displace oxygen. Use caution when applying carbon dioxide in confined spaces. Sand or earth may be used for small fires only.

Unsuitable Extinguishing Media:  
No data available.

Specific Hazards in Case of Fire:  
Hazardous combustion products can include carbon monoxide, carbon dioxide & hydrocarbons. Sulfur oxides.

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 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.

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 dust. Avoid contact with skin, eye or clothing. 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:
- Collect by vacuuming or sweeping into suitable containers and dispose of in accordance with local regulations.

SECTION 7) HANDLING AND STORAGE

General:
- Wash hands after use.
- Do not get in eyes, on skin or on clothing.
- Do not breathe dusts.
- Use good personal hygiene practices.
- Eating, drinking and smoking in work areas is prohibited.
- Remove contaminated clothing and protective equipment before entering eating areas.

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, 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.

SECTION 8) EXPOSURE CONTROLS/PERSONAL PROTECTION

Eye protection:
- Wear dust-proof goggles.

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:
- If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker, a respiratory protection program that meets or is equivalent to OSHA 29 CFR 1910.134 and ANSI Z88.2 should be followed. Check with respiratory protective equipment suppliers.

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

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>OSHA STEL (ppm)</th>
<th>OSHA TWA (mg/m³)</th>
<th>OSHA TWA (ppm)</th>
<th>OSHA STEL (mg/m³)</th>
<th>OSHA Skin Carcinogen</th>
<th>OSHA Designation</th>
<th>OSHA Tables (Z₁, Z₂, Z₃)</th>
<th>NIOSH TWA (mg/m³)</th>
<th>NIOSH TWA (ppm)</th>
<th>NIOSH STEL (mg/m³)</th>
<th>NIOSH STEL (ppm)</th>
<th>NIOSH Skin Carcinogen</th>
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<td>[1,3]; [3];</td>
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### Chemical Name

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<th>ACGIH TWA (mg/m³)</th>
<th>ACGIH TWA (ppm)</th>
<th>ACGIH STEL (mg/m³)</th>
<th>ACGIH STEL (ppm)</th>
<th>ACGIH TLV Basis</th>
<th>ACGIH Carcinogen</th>
<th>ACGIH Notations</th>
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<td><strong>BITUMENS</strong></td>
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<td>A4</td>
<td>A4, BEI</td>
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<tr>
<td>MINERAL OIL, PETROLEUM DISTILLATES, SOLVENT-DEWAXED HEAVY PARAFFINIC</td>
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<tr>
<td>SILICA, CRYSTALLINE</td>
<td>0.025 (R)</td>
<td>Pulmonary fibrosis; lung cancer</td>
<td>A2</td>
<td>A2</td>
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</table>

A2 - Suspected Human Carcinogen, A4 - Not Classifiable as a Human Carcinogen, BEI - Substances for which there is a Biological Exposure Index or Indices, irr - Irritation, URT - Upper respiratory tract

### SECTION 9) PHYSICAL AND CHEMICAL PROPERTIES

**Physical and Chemical Properties**

- **Density**: 1.00 lb/gal
- **% Solids By Weight**: N/A
- **Density VOC**: 0.00 lb/gal
- **% VOC**: 0.00%
- **Specific Gravity**: 0.12
- **Appearance**: Black liable solid rubber
- **Odor Threshold**: N/A
- **Odor Description**: Light Petroleum
- **pH**: N/A
- **Water Solubility**: Insoluble in water
- **Flammability**: N/A
- **Flash Point Symbol**: N/A
- **Flash Point**: N/A
- **Viscosity**: N/A
- **Lower Explosion Level**: N/A
- **Upper Explosion Level**: N/A
- **Vapor Pressure**: N/A
- **Vapor Density**: N/A
- **Freezing Point**: N/A
SECTION 10) STABILITY AND REACTIVITY

Stability:
The product is stable under normal storage conditions.

Conditions to Avoid:
Temperatures over 400°F may cause resin degradation.

Hazardous Reactions/Polymerization:
Will not occur.

Incompatible Materials:
No data available.

Hazardous Decomposition Products:
Carbon monoxide, various hydrocarbons and sulfur oxides.

SECTION 11) TOXICOLOGICAL INFORMATION

Likely Route of Exposure:
Inhalation, ingestion, skin absorption, eye contact.

Skin Corrosion/Irritation:
No data available

Serious Eye Damage/Irritation:
No data available

Respiratory/Skin Sensitization:
No data available

Germ Cell Mutagenicity:
No data available

Carcinogenicity:
May cause cancer.

Reproductive Toxicity:
No data available

Specific Target Organ Toxicity - Single Exposure:
No data available

Specific Target Organ Toxicity - Repeated Exposure:
Under extreme and non-normal circumstances such as extensive cutting, grinding and pulverizing, there is some potential exposure to respirable crystalline silica (quartz). Prolonged and frequent exposure to such conditions could in some instances cause silicosis, a fibrosis of the lungs.
May cause damage to organs through prolonged or repeated exposure.

Aspiration Hazard:
No data available

Acute Toxicity:
No data available.
**SECTION 12) ECOLOGICAL INFORMATION**

**Toxicity:**
No data available

**Persistence and Degradability:**
No data available.

**Other Adverse Effects:**
No data available.

**Bio-accumulative Potential**
0064742-65-0 MINERAL OIL, PETROLEUM DISTILLATES, SOLVENT-DEWAXED HEAVY PARAFFINIC
Contains constituents with the potential to bioaccumulate.

**Mobility in Soil**
0064742-65-0 MINERAL OIL, PETROLEUM DISTILLATES, SOLVENT-DEWAXED HEAVY PARAFFINIC
Liquid under most environmental conditions. Floats on water. If it enters soil, it will adsorb to soil particles and will not be mobile.

**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.

**SECTION 14) TRANSPORT INFORMATION**

**U.S. DOT Information:**
UN/NA #: Not regulated
Proper Shipping Name: Not applicable
Hazard Class: Not applicable
Packing Group: Not applicable

**IMDG Information:**
UN/NA #: Not regulated
Proper Shipping Name: Not applicable
Hazard Class: Not applicable
Packing Group: Not applicable
Marine Pollutant: No data available
IATA Information:
UN/NA #: Not regulated
Proper Shipping Name: Not applicable
Hazard Class: Not applicable
Packing Group: Not applicable

SECTION 15) REGULATORY INFORMATION

<table>
<thead>
<tr>
<th>CAS</th>
<th>Chemical Name</th>
<th>% By Weight</th>
<th>Regulation List</th>
</tr>
</thead>
<tbody>
<tr>
<td>0008052-42-4</td>
<td>BITUMENS</td>
<td>60% - 70%</td>
<td>SARA312, IARCCarcinogen, TSCA, TSCA_UVCB - CHEMICAL SUBSTANCES OF UNKNOWN OR VARIABLE COMPOSITION, COMPLEX REACTION PRODUCTS AND BIOLOGICAL MATERIALS</td>
</tr>
<tr>
<td>0014808-60-7</td>
<td>SILICA, CRISTALLINE</td>
<td>10% - 25%</td>
<td>SARA312, IARCCarcinogen, NTPCarcinogen, TSCA, CA_Prop65 - California Proposition 65, CA_Prop66_Type_Toxicity_Cancer - CA_Proposition65_Type_Toxicity_Cancer</td>
</tr>
<tr>
<td>0009003-55-8</td>
<td>Polymers</td>
<td>0.0% - 10%</td>
<td>SARA312, VOC, IARCCarcinogen, TSCA</td>
</tr>
<tr>
<td>0064742-65-0</td>
<td>MINERAL OIL, PETROLEUM DISTILLATES, SOLVENT-DEWAXED HEAVY PARAFFINIC</td>
<td>0.0% - 5%</td>
<td>SARA312, TSCA, TSCA_UVCB - CHEMICAL SUBSTANCES OF UNKNOWN OR VARIABLE COMPOSITION, COMPLEX REACTION PRODUCTS AND BIOLOGICAL MATERIALS</td>
</tr>
</tbody>
</table>

SECTION 16) OTHER INFORMATION

Glossary:
ACGIH- American Conference of Governmental Industrial Hygienists; ANSI- American National Standards Institute; Canadian TDGCanadian 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      | ★ 2 |
| FLAMMABILITY| 0   |
| PHYSICAL HAZARD| 0 |
| PERSONAL PROTECTION| C |

( *) - 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: Sep 23, 2016
First Edition.

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