SAFETY DATA SHEET

SECTION 1 – PRODUCT AND COMPANY IDENTIFICATION

<table>
<thead>
<tr>
<th>MATERIAL NAME:</th>
<th>Asphalt Rolled Roofing</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDS NUMBER</td>
<td>401</td>
</tr>
<tr>
<td>PRODUCT DESCRIPTION:</td>
<td>Asphalt Coated Fiberglass Reinforced Underlayment</td>
</tr>
<tr>
<td>CHEMICAL FAMILY:</td>
<td>Mixture</td>
</tr>
<tr>
<td>PRODUCT USE:</td>
<td>Weatherproofing</td>
</tr>
<tr>
<td>TRADE NAME (S):</td>
<td>LeakBarrier® GlassBase</td>
</tr>
<tr>
<td>MANUFACTURER:</td>
<td>Tarco</td>
</tr>
<tr>
<td></td>
<td>One Information Way</td>
</tr>
<tr>
<td></td>
<td>Suite 225</td>
</tr>
<tr>
<td></td>
<td>Little Rock, AR 72202</td>
</tr>
<tr>
<td></td>
<td>United States</td>
</tr>
<tr>
<td></td>
<td><a href="http://www.tarcoroofing.com">www.tarcoroofing.com</a></td>
</tr>
<tr>
<td></td>
<td><a href="mailto:tarco@tarcoroofing.com">tarco@tarcoroofing.com</a></td>
</tr>
<tr>
<td>TELEPHONE (TECHNICAL)</td>
<td>800-365-4506 (8:00 AM – 5:00 PM - US Central Time) Monday - Friday</td>
</tr>
<tr>
<td>TELEPHONE (EMERGENCY)</td>
<td>800-424-9300 (Chemtrec, in English)</td>
</tr>
</tbody>
</table>

SECTION 2 – HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:
Overview: All components listed for this product are bound within the product. When handled as intended and under normal conditions of use, the product listed in this SDS is not expected to pose a physical hazard or health risk to humans. This product does not contain any form of asbestos materials.

Prevention: Avoid breathing dust, fumes, gas, mist, vapors, and/or spray.

Storage/Disposal: Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Route of Exposure: Inhalation, Skin, Eye, Ingestion

POTENTIAL HEALTH EFFECTS:

Inhalation: Not expected under normal conditions of use. However, extreme exposures to dust and fumes may cause upper respiratory irritation.

Skin: Not expected under normal conditions of use. Repeated contact may cause skin irritation due to roughness of product. Redness, drying and cracking of the skin (dermatitis) may occur following prolonged and repeated contact. Prolonged or repeated skin contact could result in absorption of hazardous components.

Ingestion: Not intended to be ingested (eaten). If ingested, it may cause temporary irritation to the gastrointestinal (digestive) tract.

Eyes: Not expected under normal conditions of use. If dust enters eye, may cause irritation resulting in tearing, stinging, redness or swelling.

Carcinogenicity: When used under normal conditions, this product is not considered a carcinogen.
HAZARD RATING (NFPA) | HAZARD RATING (HMIS®)
--- | ---
**HEALTH** | 1 | 1
**FLAMMABILITY** | 1 | 1
**REACTIVITY** | 0 | 0
**SPECIAL NOTICE** | - | X

**NFPA – National Fire Protection Association**
**HMIS® is a registered trademark of the American Coatings Association**

Degree of Hazard
0 - Minimal (Insignificant)
1 - Slight
2 - Moderate
3 - Serious (High)
4 - Severe (Extreme)

SECTION 3 – COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>CHEMICAL NAME</th>
<th>COMMON NAME</th>
<th>CAS NUMBER</th>
<th>PERCENT BY WEIGHT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oxidized Asphalt</td>
<td>Coating Asphalt</td>
<td>64742-93-4</td>
<td>15-51</td>
</tr>
<tr>
<td>Calcium Carbonate</td>
<td>Limestone</td>
<td>1317-65-3</td>
<td>6-26</td>
</tr>
<tr>
<td>Continuous Filament Glass Fiber</td>
<td>Glass Mat</td>
<td>65997-17-3</td>
<td>4-10</td>
</tr>
<tr>
<td>Coal Slag Fines</td>
<td>Slag</td>
<td>68476-96-0</td>
<td>8-30</td>
</tr>
</tbody>
</table>

Note:
NA = Not Available
NE = Not Established

SECTION 4 – FIRST AID MEASURES

**INHALATION**
If product is heated, exposure to fumes, vapors, or mists may cause irritation of the nose and throat. Drink water to clear throat or blow nose to clear. Use of product in properly ventilated areas is not expected to cause adverse effects. Remove to fresh, uncontaminated air. Give artificial respiration and/or oxygen by trained personnel, if necessary and get immediate medical attention.

**SKIN**
Remove contaminated clothing and wash exposed skin with soap and water. If irritation develops or persists, seek medical attention. If contacted by hot asphalt, cool with ice or water; do not attempt to remove the asphalt material immediately; seek medical attention.

**INGESTION**
If product is ingested, do not induce vomiting. If vomiting occurs, keep head lower than hips to avoid aspiration of vomit into the lungs, which can cause inflammation or pneumonitis. Get immediate medical attention.

**EYES**
If material comes into contact with the eyes, immediately flush with plenty of cool water for at least 20 minutes preferably at an eye wash fountain or until irritation subsides, occasionally lifting the eye lids to ensure thorough rinsing. If irritation develops or persists, seek medical attention.
NOTES TO PHYSICIANS/FIRST AID PROVIDERS

Treatment must be based on removing the source of irritation with treatment of symptoms as necessary. Water-Jel products have been shown to be effective in removing asphalt.

SECTION 5 – FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA
Water spray, Foam, Carbon Dioxide, Dry Chemical.

UNSUITABLE-EXTINGUISHING MEDIA
No data available

HAZARDOUS COMBUSTION-PRODUCTS
Carbon Dioxide, Carbon Monoxide. If burned, the material could release toxic fumes and smoke.

FIRE FIGHTING-PROCEDURES
Combustible. Avoid breathing fumes. Use extinguishing measures that are appropriate to local circumstances and surrounding environment.

FIRE FIGHTER PROTECTION
Firefighters should not enter confined space without wearing NIOSH-approved self-contained breathing apparatus with full face mask and protective equipment.

UNUSUAL FIRE AND-EXPLOSION HAZARDS
When heated, fumes may burn if ignition source is provided. Burning the products will yield thick, black smoke. Petroleum asphalt fumes can explode if emitted in an enclosed environment and supplied with an ignition source.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS
Not applicable

EMERGENCY PROCEDURES
Not applicable

ENVIRONMENTAL-PRECAUTIONS
No data available

CLEAN-UP PROCEDURES
Pick up large pieces. Vacuum dust. If sweeping is necessary, avoid creating dusts by using a dust suppressant such as water. This will help to minimize potential exposures.

WASTE DISPOSAL METHOD
Scoop up material and dispose in accordance with Federal, State, and local regulations. Do not burn.

SECTION 7 – HANDLING AND STORAGE

HANDLING PROCEDURES
Use this product with adequate ventilation. When handling uncontained material, use personal protective equipment as described in Section 8 of this SDS. Do not remove release liner where sparks may ignite flammable vapors. Release liners are slippery. Remove from work area immediately.

STORAGE PROCEDURES
Store material in accordance with instructions on the product packaging, if any. Material should be kept clean, dry, and in original packaging. Keep this product away from heat, sparks, ignition sources, and open flames in accordance with applicable laws and regulations.

SPECIAL PACKAGING-MATERIALS
No data available

INCOMPATIBLE MATERIALS
This product will react with strong oxidizing agents, reducing agents, strong acids and alkalis.

OTHER PRECAUTIONS
Do not breathe dusts or fumes generated from cutting or heating this material. Comply with OSHA and other safety standards and codes for roof work. Always use Fall Protection Systems when working on roofs. Product may be slippery when wet, dusty or covered with water, ice, dew, frost, or snow.
SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

PERSONAL PROTECTIVE EQUIPMENT:

RESPIRATORY-PROTECTION

Not needed under normal use conditions. If exposure limits are exceeded, use a NIOSH approved respirator. Follow all applicable respirator use, fitting, and training standards and regulations.

EYES/FACE PROTECTION

Safety glasses with side shields are recommended

HANDS PROTECTION

Leather or cotton gloves recommended when handling to protect against mechanical abrasion. Promptly clean hands with waterless hand cleaner, clean fingernails and wash with soap and water after handling.

SKIN/BODY PROTECTION

Normal work clothing (long sleeved shirts, long pants, and non-skid shoes or boots with 6-inch leather uppers) is recommended during application and/or tear-off activities.

OTHER PROTECTIVE-EQUIPMENT

Should be provided as necessary to prevent irritation of the throat, eyes, and skin and to keep exposures below the applicable exposure limits identified in this section.

WORK HYGIENE-PRACTICES

Use good industrial hygiene practices when handling the material. Wash exposed skin prior to eating, drinking or smoking and at the end of the shift. Wash work clothes separately from other clothing.

EXPOSURE GUIDELINES

Handle using methods and techniques that minimize dust or fume generation.

ENGINEERING CONTROLS/VENTILATION

Not needed under normal conditions of use.

<table>
<thead>
<tr>
<th>CHEMICAL NAME</th>
<th>COMMON NAME</th>
<th>CAS NUMBER</th>
<th>EXPOSURE LIMIT</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>ACGIH (TWA)</td>
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<tr>
<td>Oxidized Asphalt</td>
<td>Coating Asphalt</td>
<td>64742-93-4</td>
<td>0.5 mg/m³</td>
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<tr>
<td>Calcium Carbonate</td>
<td>Limestone</td>
<td>1317-65-3</td>
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<tr>
<td>Continuous Filament Glass Fiber</td>
<td>Glass Mat</td>
<td>65997-17-3</td>
<td>5 mg/m³</td>
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<tr>
<td>Coal Slag Fines</td>
<td>Slag</td>
<td>68476-96-0</td>
<td>10 mg/m³</td>
</tr>
</tbody>
</table>

Note:

NA = Not Available

NE = Not Established

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Physical Form</th>
<th>Solid</th>
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</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Sheet in roll form</td>
<td>Odor</td>
<td>Petroleum odor</td>
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<td>Color</td>
<td>Black</td>
<td>Odor Threshold</td>
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<td>Boiling Point</td>
<td>&gt;650⁰ F</td>
<td>Vapor Pressure</td>
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<tr>
<td>Melting Point</td>
<td>&gt;200⁰ F</td>
<td>Vapor Density</td>
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<tr>
<td>Freezing Point</td>
<td>No data</td>
<td>Evaporation Rate</td>
<td>No data</td>
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<tr>
<td>Specific Gravity</td>
<td>Variable</td>
<td>VOC (Weight)</td>
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</tr>
<tr>
<td>Property</td>
<td>Value</td>
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<td>Value</td>
</tr>
<tr>
<td>--------------------------------</td>
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<tr>
<td>Density</td>
<td>No data</td>
<td>VOC (Volume)</td>
<td>No data</td>
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<tr>
<td>Bulk Density</td>
<td>No data</td>
<td>Volatiles (Weight)</td>
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<td>Viscosity</td>
<td>No data</td>
<td>Volatiles (Volume)</td>
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<td>pH (Undiluted Product)</td>
<td>No data</td>
<td>Flash Point</td>
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<tr>
<td>Water Solubility</td>
<td>Insoluble</td>
<td>Flash Point Test Type</td>
<td>COC</td>
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<td>Solvent Solubility</td>
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<td>Upper Explosion Limit</td>
<td>No data</td>
</tr>
<tr>
<td>Partition Coefficient - Octanol/Water</td>
<td>No data</td>
<td>Lower Explosion Limit</td>
<td>No data</td>
</tr>
<tr>
<td>Molecular Weight</td>
<td>No data</td>
<td>Auto Ignition</td>
<td>&gt;860°F</td>
</tr>
<tr>
<td>Decomposition Temp.</td>
<td>No data</td>
<td>Flammability (Solid, Gas)</td>
<td>No data</td>
</tr>
</tbody>
</table>

**SECTION 10 – STABILITY AND REACTIVITY**

**THERMAL STABILITY**
Stable under normal conditions of use.

**HAZARDOUS-DECOMPOSITION**
Upon decomposition this product may form carbon dioxide, carbon monoxide, oxides of sulfur and various hydrocarbons during heating or burning.

**HAZARDOUS-POLYMERIZATION**
Will not occur.

**CONDITIONS TO AVOID**
Keep this product away from heat, sparks, ignition sources, and open flames in accordance with applicable laws and regulations.

**INCOMPATIBLE MATERIALS**
This product will react with strong acids and alkalis, strong oxidizing agents, reducing agents, and selected amines.

**SECTION 11 – TOXICOLOGICAL INFORMATION**

**ACUTE EFFECTS**
Repeated contact may cause skin irritation due to roughness of product. If dust enters eye, may cause irritation resulting in tearing, stinging, redness or swelling. Inhalation of dust, fumes and/or vapor may cause scratchy throat and/or slight coughing. If ingested, it may cause temporary irritation to the gastrointestinal (digestive) tract.

**CHRONIC EFFECTS**
Redness, drying and cracking of the skin (dermatitis) may occur in the case of prolonged and repeated contact. Extreme exposures to fumes may cause upper respiratory irritation. Silicosis (Pulmonary Fibrosis or severe lung scarring) may occur if exposed to high levels of repeated encounters with dust.

**COMPONENT ANALYSIS**

**Oxidized Asphalt**
(OAS Number: 64742-93-4)
Occupational exposures to oxidized asphalt and its emissions during roofing have been determined by the International Agency for Research on Cancer (IARC) as ‘probably carcinogenic to humans’.

**Continuous Filament Glass Fiber**
(CAS Number: 65997-17-3)
The International Agency for Research on Cancer (IARC) has classified continuous filament glass fiber as a Group 3 substance, not classifiable as to its carcinogenicity to humans. Because of the large diameter of continuous filament fibers, these products are not considered respirable.
SECTION 12 – ECOLOGICAL INFORMATION

ECOTOXICITY No data available for this product
PERSISTENCE/DEGRADABILITY No data available for this product
BIOACCUMULATION-POTENTIAL No data available for this product
MOBILITY IN SOIL No data available for this product
OTHER ADVERSE EFFECTS-(GHG, OZONE) No data available for this product

SECTION 13 – DISPOSAL CONSIDERATIONS

PRODUCT INFORMATION This product, as supplied, is not expected to be a hazardous waste when it is disposed of according to the U.S. Environmental Protection Agency (EPA) under Resource Conservation and Recovery Act (RCRA) regulations.
DISPOSAL INSTRUCTIONS Dispose of waste material in accordance with Federal, State, and Local environmental regulations.
RCRA CLASS None

SECTION 14 – TRANSPORT INFORMATION

U. S. DEPARTMENT OF TRANSPORTATION
Proper Shipping Name N/A
Hazard Class N/A
ID Number N/A
Packing Group N/A
Label Statement N/A
Other N/A

INTERNATIONAL TRANSPORT REGULATIONS:
This product is not classified as dangerous goods according to international transport regulations.
UN Number N/A
UN Proper Shipping Name N/A
Packing Group N/A
Environmental Hazards N/A
Transport in Bulk N/A
Special Precautions N/A

SECTION 15 – REGULATORY INFORMATION

INTERNATIONAL REGULATIONS
These products are not considered articles per international product regulations and as such, these products do not require registration or notification on the various country-specific inventories.

U. S. FEDERAL REGULATIONS
TSCA This product contains some components that are listed on the TSCA 8(b) inventory
CERCLA None
SARA
Section 302 None of the product components are listed under this section
Section 311/312 Acute Health: Yes; Chronic Health: Yes
Section 313  None of the product components are listed under this section

STATE REGULATIONS  Component Analysis – State: The following components appear on one or more of the following state hazardous substances lists.

<table>
<thead>
<tr>
<th>CHEMICAL NAME</th>
<th>COMMON NAME</th>
<th>CAS NUMBER</th>
<th>CA</th>
<th>MA</th>
<th>MN</th>
<th>NJ</th>
<th>PA</th>
<th>RI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asphalt</td>
<td>Asphalt Flux</td>
<td>8052-42-4</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Oxidized Asphalt</td>
<td>Coating Asphalt</td>
<td>64742-93-4</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Calcium Carbonate</td>
<td>Limestone</td>
<td>1317-65-3</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Continuous Filament Glass Fiber</td>
<td>Glass Mat</td>
<td>65997-17-3</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Note:  
TSCA  Toxic Substances Control Act  
CERCLA  Comprehensive Environmental Response Compensation and Liabilities Act  
SARA  Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III  
Section 302  Extremely Dangerous Hazardous Substances  
Section 311/312  Immediate health; Delayed health; Fire hazard  
Section 313  Reportable Ingredients

SECTION 16 – OTHER INFORMATION

DATE OF PREPARATION  November 11, 2019
DATE OF LAST REVISION  January 16, 2019

CHANGES SINCE LAST-REVISION
- Removal of Crystalline Silica as a component in sections 3, 8, and 15
- Addition of Coal Slag Fines as a component in sections 3 and 8
- Removal of Crystalline Silica from the component analysis in Section 11
- Removal of California Prop 65 language in Section 15

PREPARED BY  Tarco

DISCLAIMER  
The information and recommendations contained herein are to the best of the manufacturer’s knowledge and belief, and are presented in good faith and believed to be accurate as of the effective date given. However, no warranty, expressed or implied, is given. It is the buyer’s responsibility to ensure that its activities comply with Federal, State, and Local laws. The supplier shall not be liable for any loss or damage arising out of the use thereof. The information and recommendations are offered for the user’s consideration and examination, and it is the user’s responsibility to ensure the suitability and completeness of such information for a particular use. No information or recommendation shall be deemed to be a recommendation to use any product in conflict with any existing patent rights.