Green-Lock™ Membrane Adhesive
Safety Data Sheet
According to Federal Register/Vol. 77, No. 58/Monday, March 26, 2012/Rules and Regulations
Revision Date: N/A Date of issue: 12/16/2014

SECTION 1: IDENTIFICATION
Product Identifier
Product Form: Paste
Product Name: Green-Lock™ Membrane Adhesive
Product Code: 7301
Intended Use of the Product
Adhesive
Name, Address, and Telephone of the Responsible Party
Manufacturer
The Garland Company, Inc.
3800 East 91st Street
Cleveland, Ohio 44105
T-800-762-8225
F-216-641-0633
www.garlandco.com
Supplier
The Garland Company, Inc.
3800 East 91st Street
Cleveland, Ohio 44105
T-800-762-8225
F-216-641-0633
www.garlandco.com
Emergency Telephone Number
Emergency Number: 1-800-262-8200 (CHEMTREC)

SECTION 2: HAZARDS IDENTIFICATION
Classification of the Substance or Mixture
Classification (GHS-US)
Skin Irrit. 2 H227
Eye Irrit. 2 H315
Skin Sens. 1 H317
Resp. Sens. 1 H318
Label Elements
GHS-US Labeling
Hazard Pictograms (GHS-US):
Signal Word (GHS-US) : Warning
Hazard Statements (GHS-US) : H227 – Combustible liquid.
                          H315 – Causes skin irritation.
                          H317 – May cause an allergic skin reaction.
                          H318 – Causes serious eye damage.
                                P261 – Avoid breathing dust/fume/gas/mist/vapors/sprays.
                                P264 – Wash skin thoroughly after handling.
                                P272– Contaminated work clothing should not be allowed out of the workplace.
                                P280 – Wear protective gloves/protective clothing/eye protection/face
                                             protection.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS
Component
Name          | Product Identifier | % (w/w) | Classification (GHS-US)
Asphalt       | (CAS No) 8052-42-4 | 10-30   | Flam. Liq. 2, H225
              |                   |         | Eye Irrit. 2A, H319
              |                   |         | Carc.2, H351
Green-Lock™ Membrane Adhesive

Safety Data Sheet
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| Amino Silane | (CAS No) 1760-24-3 | 1-3 | Flam. Liq. 4, H227
|             |                   |     | Skin irrit. 2, H315
|             |                   |     | Skin sens. 1, H317
|             |                   |     | Eye dam. 1 , H318 |

SECTION 4: FIRST AID MEASURES

Description of First Aid Measures

General: First Aid responders should pay attention to self-protection and use the recommended protective clothing (chemical resistant gloves, splash protection). If potential for exposure exists refer to Section 8 for specific personal protective equipment.

Inhalation: An unlikely route of entry. Remove to fresh air. Consult a physician.

Skin Contact: Clean product from affected area with Ethyl Alcohol, then wash with soap and water.

Eye Contact: Flush with large amounts of water for at least 15 minutes. Consult a physician if ill.

Ingestion: An unlikely route of entry. Consult a physician.

Most Important Symptoms and Effects Both Acute and Delayed

General: May be fatal if swallowed and enters airways. Causes serious eye irritation. Causes skin irritation.

Indication of Immediate Medical Attention and Special Treatment Needed

General: If medical advice is needed, have product container or label at hand.

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media: Water, CO₂, Dry Chemical, Foam.

Unsuitable Extinguishing Media: Do not use direct water stream. May spread fire.

Special Hazards Arising From the Substance or Mixture

Hazardous Combustion Products: Thermal decomposition may produce toxic fumes of Carbon Monoxide, Carbon Dioxide, Sulfur oxides and Hydrogen.

Fire and Explosion Hazards: May form flammable/explosive vapor-air mixture.

Advice for Firefighters

Fire Fighting Procedures: Exercise caution when fighting any chemical fire.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Use personal protection recommended in section 8. Avoid eye, skin and clothing contact.

Environmental Precautions

Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information.

Methods and Materials for Containment and Cleaning Up

For Containment: Contain spilled material if possible. Absorb with materials such as: Dirt. Vermiculite. Sand.

Methods for Cleaning Up: Collect spill with absorbent material such as cardboar, allow to cure and place into container approved for waste disposal.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling

General Handling: Use personal protection recommended in section 8. Avoid eye, skin and clothing contact.

Conditions for Safe Storage

General: Store in a cool, dry area. This product polymerizes when in contact with moisture.

Shelf Life: 6 Months at a storage temperature of 56 - 77°F (15 - 25°C).

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

| Asphalt (8052-42-4) | OEL TWA (mg/m³) | 5 mg/m³ |
| Mexico | OEL STEL (mg/m³) | 10 mg/m³ |
| Mexico | ACGIH TWA (mg/m³) | 0.5 mg/m³ |
| USA ACGIH | NIOSH REL (ceiling) (mg/m³) | 5 mg/m³ |
| USA NOISH | OEL TWA (mg/m³) | 5 mg/m³ |
| Alberta | OEL TWA (mg/m³) | 5 mg/m³ |
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**Safety Data Sheet**

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<table>
<thead>
<tr>
<th>Province</th>
<th>OEL TWA (mg/m³)</th>
<th>OEL STEL (mg/m³)</th>
</tr>
</thead>
<tbody>
<tr>
<td>British Columbia</td>
<td>0.5 mg/m³</td>
<td></td>
</tr>
<tr>
<td>Manitoba</td>
<td>0.5 mg/m³</td>
<td></td>
</tr>
<tr>
<td>New Brunswick</td>
<td>5 mg/m³</td>
<td></td>
</tr>
<tr>
<td>Newfoundland &amp; Labrador</td>
<td>0.5 mg/m³</td>
<td></td>
</tr>
<tr>
<td>Nova Scotia</td>
<td>0.5 mg/m³</td>
<td></td>
</tr>
<tr>
<td>Nunavut</td>
<td>10 mg/m³</td>
<td></td>
</tr>
<tr>
<td>Nunavut</td>
<td>5 mg/m³</td>
<td></td>
</tr>
<tr>
<td>Northwest Territories</td>
<td>10 mg/m³</td>
<td></td>
</tr>
<tr>
<td>Northwest Territories</td>
<td>5 mg/m³</td>
<td></td>
</tr>
<tr>
<td>Ontario</td>
<td>0.5 mg/m³</td>
<td></td>
</tr>
<tr>
<td>Prince Edward Island</td>
<td>0.5 mg/m³</td>
<td></td>
</tr>
<tr>
<td>Quebec</td>
<td>5 mg/m³</td>
<td></td>
</tr>
<tr>
<td>Saskatchewan</td>
<td>1.5 mg/m³</td>
<td></td>
</tr>
<tr>
<td>Saskatchewan</td>
<td>0.5 mg/m³</td>
<td></td>
</tr>
<tr>
<td>Yukon</td>
<td>10 mg/m³</td>
<td></td>
</tr>
<tr>
<td>Yukon</td>
<td>5 mg/m³</td>
<td></td>
</tr>
</tbody>
</table>

**Appropriate Engineering Controls:** Use only with adequate ventilation. Local exhaust ventilation may be necessary for some operations. Provide general and/or local exhaust ventilation to control airborne levels below the appropriate guidelines. Exhaust systems should be designed to move the air away from the source of vapor generation and people working at this point.

**Personal Protective Equipment:** Protective goggles. Gloves.

**Hand Protection:** Wear impervious gloves such as vinyl to minimize contact with skin.  
**Eye Protection:** Wear safety glasses or goggles to avoid eye contact.  
**Skin Protection:** Wear impervious gloves such as vinyl to minimize contact with skin.  
**Environmental Exposure Controls:** No specific controls are needed.

### SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

#### Information on Basic Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical State</td>
<td>Black paste</td>
</tr>
<tr>
<td>Color</td>
<td>Black</td>
</tr>
<tr>
<td>Odor</td>
<td>Mild mint scent</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>Not applicable</td>
</tr>
<tr>
<td>pH</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Melting Point</td>
<td>No test data available</td>
</tr>
<tr>
<td>Freezing Point</td>
<td>No test data available</td>
</tr>
<tr>
<td>Boiling Point (760 mm Hg)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Flash Point – Closed Cup</td>
<td>No test data available</td>
</tr>
<tr>
<td>Evaporation Rate (Butyl Acetate = 1)</td>
<td>No test data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Flammability Limits in Air</td>
<td>Lower: No test data available; Upper: No test data available</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>&lt; 1</td>
</tr>
<tr>
<td>Vapor Density (Air = 1)</td>
<td>&gt;1</td>
</tr>
<tr>
<td>Specific Gravity (H₂O = 1)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Solubility in Water (by wt)</td>
<td>Insoluble</td>
</tr>
</tbody>
</table>
**Green-Lock™ Membrane Adhesive**

Safety Data Sheet
According to Federal Register/Vol. 77, No. 58/Monday, March 26, 2012/Rules and Regulations
Revision Date: N/A

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**Explosive Properties**
- Not explosive

**% Volatile**
- 2.3%

**VOC**
- 32 g/L

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**SECTION 10: STABILITY AND REACTIVITY**

**Reactivity**: This product polymerizes when in contact with moisture.

**Chemical Stability**: Stable under recommended storage conditions. See Storage, Section 7.

**Possibility of Hazardous Reactions**: Will not occur.

**Conditions to Avoid**: None known.

**Incompatible Materials**: None known.

**Hazardous Decomposition Products**: Thermal decomposition may produce toxic fumes of CO and/or CO₂.

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**SECTION 11: TOXICOLOGICAL INFORMATION**

**Information on Toxicological Effects – Product**

**Acute Toxicity**: Not classified.

**LD₅₀ and LC₅₀ Data**: Not available.

**Skin Corrosion/Irritation**: Not available.

**Serious Eye Damage/Irritation**: Causes eye irritation.

**Respiratory or Skin Sensitization**: Causes skin irritation.

**Germ Cell Mutagenicity**: No data available.

**Teratogenicity**: No data available.

**Carcinogenicity**: May cause cancer (inhalation).

**Specific Target Organ Toxicity (Repeated Exposure)**: Not classified.

**Reproductive Toxicity**: No relevant data found.

**Specific Target Organ Toxicity (Single Exposure)**: Not classified.

**Aspiration Hazard**: May be fatal if swallowed and enters airways.

**Symptoms/Injuries After Inhalation**: May be fatal if swallowed and enters airways.

**Information on Toxicological Effects – Ingredient(s)**

**LD₅₀ and LC₅₀ Data**:

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>LD₅₀, Oral Rat</th>
<th>LD₅₀, Dermal Rabbit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asphalt (8052-42-4)</td>
<td>&gt; 5,000 mg/kg</td>
<td>&gt; 2,000 mg/kg</td>
</tr>
<tr>
<td>IARC Group</td>
<td>2B</td>
<td></td>
</tr>
<tr>
<td>National Toxicity Program Status</td>
<td>Twelfth Report – Items under consideration</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>LD₅₀, rat</th>
<th>LD₅₀, Dermal Rabbit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amino Silane (1760-24-3)</td>
<td>&gt; 2,000 mg/kg</td>
<td>&gt; 2,000 mg/kg</td>
</tr>
</tbody>
</table>

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**SECTION 12: ECOLOGICAL INFORMATION**

**Toxicity**
No known applicable information.

**Persistence and Degradability**
No known applicable information.

**Mobility in Soil**

**Mobility in Soil**: In the aquatic and terrestrial environment, movement is expected to be limited.

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**SECTION 13: DISPOSAL CONSIDERATIONS**

**Waste Disposal Recommendations**: Dispose of waste material in accordance with all local, regional, national, and international regulations. Regulations may vary in different locations. Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator.

**Unused and Contaminated Product**: Preferred option includes sending to a licensed, permitted: Recycler, Reclaimer, Incinerator or other thermal destruction device. For additional information, refer to: Handling & Storage Information, SDS Section 7; Stability & Reactivity Information, SDS Section 10; Regulatory Information, SDS Section 15.
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SECTION 14: TRANSPORT INFORMATION

14.1 In Accordance with DOT
   Proper Shipping Name : Tars, liquid – NOT REGULATED NON BULK
   Hazard Class : 3
   Identification Number : UN1999
   Packing Group : III

14.2 In Accordance with IMDG
   Proper Shipping Name : Tars, liquid
   Hazard Class : 3
   Identification Number : UN1999
   Packing Group : 3

14.3 In Accordance with IATA
   Proper Shipping Name : Tars, liquid
   Hazard Class : 3
   Identification Number : UN1999
   Packing Group : 3

SECTION 15: REGULATORY INFORMATION

US Federal Regulations
TSCA – All components of this product are listed on TSCA Inventory.
CERCLA Reportable Quantity – Not applicable
SARA Title III:
   Section 302 Extremely Hazardous Substances – None
   Section 304 – Not applicable.
   Section 311/312 – Immediate (acute) health hazard.
   Section 313 – None
RCRA – Refer to section 13.
California Proposition 65 Carcinogens: This product does not contain any chemicals known by the state of California to cause cancer.
California Proposition 65 Reproductive Toxins: This product does not contain any chemicals known by the state of California to cause reproductive harm.

<table>
<thead>
<tr>
<th><strong>Asphalt (8052-42-4)</strong></th>
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<td>SARA 311/312</td>
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Canadian Regulations
WHMIS Classification – D2B
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SECTION 16: OTHER INFORMATION

Revision Date : Not Applicable
Other Information : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.
Party Responsible for the Preparation of This Document : The Garland Company, Inc.
3800 East 91st Street
Cleveland, Ohio 44105-2197
T-1800-762-8225
F-216-641-0633

This information is based on our knowledge as of the Revision Date and is intended to describe the product only for the purposes of health, safety and environmental requirements as of the Revision Date. It should not therefore be construed as guaranteeing any specific property of the product nor as providing any warranty, expressed or implied. The user assumes all responsibility, liability, risk of loss, damage, or expense arising out of, or in any way connected with, the handling, storage, use, or disposal of the product.