Section 1: General Information

Trade Names and Synonyms:
Miratak® 700

Chemical Names and Family: Rubberized asphalt self-adhering sheet with polyolefin fabric
Product Use: Waterproofing membrane for repaving or overlay application

Section 2: Hazardous Ingredients/Identity Information

<table>
<thead>
<tr>
<th>Ingredient (Chemical Name, CAS#, and Common Name)</th>
<th>CAS No.</th>
<th>Percent Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Petroleum Asphalt</td>
<td>8052-42-4</td>
<td>60 - 80</td>
</tr>
<tr>
<td>Aromatic Oil</td>
<td>64742-05-8</td>
<td>5 - 20</td>
</tr>
<tr>
<td>SB Block Copolymer</td>
<td>9003-55-8</td>
<td>&lt;10</td>
</tr>
<tr>
<td>SBR Copolymer</td>
<td>9003-55-8</td>
<td>5 – 20</td>
</tr>
</tbody>
</table>

This product is hazardous according OSHA 29CFR 1910.1200.
Flammable/Combustible X  Acute Toxin X  Chronic Toxin X  Carcinogen X
Pressure No  Reactive No  Exposure Limit  Target Organ  Other

Section 3: Hazardous Identification

Emergency and Hazards Overview:
Repeated skin contact with rubberized asphalt may result in slight irritation. Prolonged skin contact with process oil in the rubberized asphalt may cause an increased risk of skin cancer, liver damage and reproduction effects based on laboratory animals tests. Skin cleansing studies with aromatic oils show that the toxic effects are not likely to occur to humans if good personal hygiene practices are used. May be harmful if swallowed. Read and understand all health and safety information on the product label and Material Safety Data Sheet before use.

Ratings
Health 2  Flammability 1  Reactivity 0

Primary Route of Exposure: Skin x Inhalation x Eye x Ingestion x

Health Effect Information
**Eye Contact:** May cause eye irritation if wiped or rubbed into eyes.

**Skin Contact:** May cause skin irritation if oil residues is wiped or left on the skin.

**Inhalation:** Inhalation is unlikely due to the nature of this product

**Ingestion:** There are no known health effects due to ingestion. Ingestion is unlikely due to the nature of this product.

Medical Conditions Aggravated by Exposure: Prolonged contact with oil residues in this product may produce effects including skin cancer.

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**Section 4: First Aid Information**

- **Eye Contact:** Flush with water for 15 minutes. Get medical attention immediately.
- **Skin Contact:** Wash promptly with soap and water. Remove all materials under fingernails. See a physician if irritation develops.
- **Inhalation:** No known adverse effect unless heated.
- **Ingestion:** Due to the nature of this product, ingestion is unlikely. Should ingestion occur, contact a physician.

Notes to Physician: This product contains asphalt and mineral process oil.

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**Section 5: Fire and Explosion Information**

- **Flammable Properties**
  - **Flash Point:** >450°F
  - **Flame extension:** NA
  - **Flammable Limits in Air**
    - Upper Percent: NA
    - Lower Percent: NA
  - **Auto Ignition Temperature:** NA

- **NFPA Classification:** H 2 F 1 R 0
- **Extinguishing Media:** CO, foam, dry chemical
- **Fire Fighting Measures**
  - **Special Fire Fighting Procedures and Equipment:** Wear NIOSH/MSHA approved respirators, or self-contained breathing apparatus (SCBA).
- **Unusual Fire and Explosion Conditions:** None known.
- **Hazardous Combustion By-Products:** CO, CO₂, unburned hydrocarbons.

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**Section 6: Accidental Release Measures**

- **Personnel Safeguards:** Rubber gloves and/or the use of barrier creams to minimize skin exposure are recommended.

- **Regulatory Notifications:** Waste of this product is defined as hazardous according to U.S. EPA. For Canada, observe all precautions noted above. Remove material for disposal.
Section 7: Handling and Storage Information

Handling: Avoid prolonged contact with skin. Use gloves impervious to oil. Avoid rubbing eyes while handling.
Storage: Store in cool ventilated space. If stored outside use covers.

Empty Container Warnings
- Drums: NA
- Plastic: NA

Section 8: Exposure Controls / Personal Protection Information

Exposure Limits and Guidelines

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS No.</th>
<th>Exposure Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asphalt</td>
<td>8052-42-4</td>
<td>5 mg/m³ TWA</td>
</tr>
<tr>
<td>Aromatic Oil</td>
<td>64742-05-08</td>
<td>5 mg/m³ TWA</td>
</tr>
</tbody>
</table>

Personal Protective Equipment

- **Eye/Face Protection:** Not required for normal use. Avoid rubbing eyes during handling.
- **Skin Protection:** Use gloves impervious to oil.
- **Respiratory Protection:** Provide adequate ventilation in confined areas or respirators if material is heated.
- **Personal Hygiene:** Avoid rubbing eyes during handling. Wear industrial shoes. Due to the nature of this product, ingestion is unlikely. Use good personal hygiene practices to avoid incidental ingestion of rubberized asphalt residues on hands.

Engineering Controls / Work Practices

- **Ventilation:** If material is heated or otherwise made airborne, provide local exhaust or mechanical exhaust if required to maintain concentration of vapors below 5 mg/m³.

- **Other:** Source of clean water should be available in the work area for flushing eyes and skin. Wash thoroughly with soap and water after use and before eating.

Section 9: Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Pliable adhesive sheet</td>
</tr>
<tr>
<td>Odor</td>
<td>Slight petroleum odor</td>
</tr>
<tr>
<td>Physical state</td>
<td>Pliable solid</td>
</tr>
<tr>
<td>pH</td>
<td>NA</td>
</tr>
<tr>
<td>DOT Corrosively</td>
<td>NA</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>NA</td>
</tr>
<tr>
<td>Vapor Density (air=1)</td>
<td>NA</td>
</tr>
<tr>
<td>Percent Volatile by Volume</td>
<td>Negligible</td>
</tr>
<tr>
<td>Volatile Organic Content</td>
<td>Negligible</td>
</tr>
<tr>
<td>Molecular Weight</td>
<td>NA</td>
</tr>
</tbody>
</table>
Boiling Point: NA
Melting Point: 185° to 270°F
Specific Gravity: 1.0-1.1
Pour Point: >300°F

Average Carbon Number: NA
Viscosity @ 40° F and 100° F: Solid
Solubility in Water: Negligible
Octanol / Water Coefficient: Log K_{ow} = NA

Section 10: Stability and Reactivity Information
Chemical Stability: Stable under normal condition.
Conditions to Avoid: Avoid extreme heat, fire, and temperature.
Incompatible Materials to Avoid: Strong oxidizers or strong basic compounds.

Section 11: Toxicological Information
Primary Eye Irritation: Irritating
Primary Skin Irritation: May be irritating
Acute Dermal Toxicity: NA
Sub acute Dermal Toxicity: NA
Dermal Sensitization: NA
Inhalation Toxicity: NA
Inhalation Sensitization: NA
Oral Toxicity: Mineral oil mist, LD_{50}(mouse): 22,000 mg/kg
Mutagenicity: NA
Carcinogenicity: Prolonged >5mg/m³ oil mist exposure may result in a cancer risk.
Reproductive Toxicity: NA
Teratogenicity: NA
Immunotoxicity: NA
Neurotoxicity: NA
Other: No other toxicological information available

Section 12: Ecological Information
Aquatic Toxicity: Not known
Terrestrial Toxicity: Not known
Chemical Fate and Transport: Not known
No other ecological information available

Section 13: Disposal Information
Regulatory Information: Consult all regulations (federal, state, provincial, local etc.) or a qualified waste disposal firm for pertinent information.
Waste Disposal Methods: Dispose of in accordance with all applicable regulations.

Section 14: Transportation Information
U.S. Department of Transportation (DOT)
Highway / Rail (Bulk): Not classified
Highway / Rail (Non-Bulk): Not classified

The DOT description is provided to assist in the proper shipping classification of this product and may not be suitable for all shipping descriptions.

International Information
Vessel: IMDG Regulated: Not classified
Air: ICAO Regulated: Not classified

Other: No other information available.

**Section 15: Regulatory Information**

Regulatory Lists
**U.S. TSCA Inventory:** All components of this material are on the US TSCA Inventory

**Sara Section 313:** This product contains no chemical listed in Sara, Title III, Section 313:

<table>
<thead>
<tr>
<th>Chemical</th>
<th>CAS Number</th>
<th>Percent in Product</th>
</tr>
</thead>
</table>

Regulatory Lists Searched
**Health & Safety:** NA
**Environmental:** NA
**International:** NA
**State:** FL, MA, MN, PA, RI
**National Inventories:** NA

**SARA 311 / 312 Categories**
**Acute:** Yes  **Chronic:** Yes  **Fire:** No  **Pressure:** No  **Reactive:** No

**Not Regulated:**

**California Proposition 65 Information:** Warning! This product contains substances known to the state of California to cause cancer.

**Canadian WHMIS Classification**
**Class:** Class B

**Division:** 4
This product has been classified in accordance with hazard criteria of the Controlled Products Regulations (CPR). This MSDS contains all the information required by the CPR.

**European Union Classification**
**Hazard Symbol:**
Toxic

Risk Phrases: R45
Safety Phrases: S38, S45, S53
Other Regulations: No other information available.

Section 16: Other Information

Health and Environmental Label Language
All ingredients contained in this product are included on the US EPA Toxic Substances Control Act (TSCA) inventory or exempt from listing on the TSCA inventory. All ingredients contained in this product complies with the requirements of the Canadian Environmental Protection Act (CEPA) and are listed on the Domestic Substance List (DSL) or Non-Domestic Substance List (NDSL)

The information and recommendations contained in this publication have been compiled from sources believed to be reliable and to represent the best current opinion on the subject at the time of publication. Since we cannot anticipate or control the many different conditions under which this information or our products may be used, we make no guarantee that the recommendations will be adequate for all individuals or situations. Each user of the product described herein should determine the suitability of the described product for his particular purpose and should comply with all federal and state rules and regulations concerning the described products.
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