SAFETY DATA SHEET

POLYMER MODIFIED BINDERS

1. PRODUCT AND COMPANY INFORMATION


**Synonym:** PG Binders

**Product Use:** Construction Material

**Company Name:** Midland Asphalt Materials Inc.
640 Young Street
Tonawanda, New York 14151-0388
Phone No. 716-692-0730
Fax No. 716-692-0613

FOR CHEMICAL EMERGENCY, SPILLS, LEAKS, FIRE, EXPOSURE OR ACCIDENT CALL 3 E
800-451-8346

2. HAZARDS IDENTIFICATION

**OSHA/HCS Status:** This substance is classified as hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

**Signal Word:** Warning

**Classification of Substance:**
Carc. 2 H351

**Hazard Pictograms:**

**Hazard Statements:**
Suspected of causing cancer 351
Obtain special instructions before use P201
Do not handle until all safety precautions have been read and understood P202
Wear protective gloves/protective clothing/eye protection P280
If exposed or concerned: Get medical advice/attention P308+P313
Store locked up P405
Precautionary Statements:

Dispose of contents/container in compliance with local, state and federal regulations P501.

Vapors and gases from heated asphalt may contain hydrogen sulfide and may be irritating to the eyes and skin. Skin contact with asphalt may cause skin irritation and allergic reactions in some individuals. Hot material may cause burns.

None of the ingredients in the mixture are of unknown toxicity.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Substance Type: Mixture

<table>
<thead>
<tr>
<th>Name</th>
<th>Product Identifier</th>
<th>%</th>
<th>Classification (GHS-US)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asphalt</td>
<td>(CAS No) 8052-42-4</td>
<td>75-99*</td>
<td>Carc. 2, H351</td>
</tr>
<tr>
<td>Polymer</td>
<td>9003-55-8</td>
<td>0-10</td>
<td></td>
</tr>
</tbody>
</table>

*The exact percentage will vary by product.

4. FIRST – AID MEASURES

Necessary First Aid Measures:

General – Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible). Suspected of causing cancer.

Inhalation – Assure fresh air breathing. Monitor for respiratory distress. If cough or difficulty breathing develops seek medical attention.

Skin Contact – Remove affected clothing if not adhered to skin and wash all exposed skin with mild soap and water, followed by warm water rinse. For hot product, immediately immerse in or flush the sheeting or gauze and seek medical attention. No attempt should be made to remove material from skin.

Eye Contact – Rinse immediately with plenty of water for 15 minutes. Obtain medical attention if pain, blinking or redness persist.

Ingestion – Rinse mouth. Do not induce vomiting. Obtain emergency medical attention.

Most important symptoms and effects, both acute and delayed.

Indication of any immediate medical attention and special treatment needed.
5. **FIRE FIGHTING MEASURES**

**Suitable Extinguishing Media:** Foam. Dry powder. Carbon dioxide. Water spray. Sand.

**Unsuitable Extinguishing Media:** Do not use a heavy water stream.

**Special Protective Equipment and Precautions for Fire-Fighters:**

- Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Contain all water used for fire-fighting to the greatest extent possible.

- Do not enter fire area without proper protective equipment, including NIOSH approved positive-pressure breathing apparatus with full face mask and full protective equipment.

6. **ACCIDENTAL RELEASE MEASURES**

**Emergency Procedures:** Evacuate unnecessary personnel.

**Protective Equipment/ Emergency Procedures:** Equip cleanup crew with proper protection. Ventilate area.

**Environmental Precautions:** Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

**Methods and Materials for Containment and Cleanup:** On land, sweep or shovel into suitable containers. If necessary, contain spill with dikes of earth or sand. Recover as much material as possible for re-use/reclamation.

*See Heading 8. Exposure controls and personal protection.*

7. **HANDLING AND STORAGE**

**Precautions for Safe Handling:** Wash hands and other exposed areas with mild soap and water before eat, drink or smoke and when leaving work. Provide good ventilation in work area to prevent formation of vapor. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.

**Conditions for Safe Storage:** Keep only in the original container in a cool, well ventilated place away from sources of ignition. Keep container closed when not in use.

**Incompatible Products/ Materials:** Strong bases. Strong acids. Sources of ignition.
8. EXPOSURE CONTROL / PERSONAL PROTECTION

Occupational Exposure Limits:

<table>
<thead>
<tr>
<th></th>
<th>USA ACGIH</th>
<th>USA ACGIH TWA (mg/m³)</th>
<th>0.5mg/m³ Inhalable fraction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrogen Sulfide (7783-06-4) may be released from this product</td>
<td>USA ACGIH</td>
<td>USA ACGIH (ppm)</td>
<td>1 ppm</td>
</tr>
<tr>
<td></td>
<td>USA ACGIH</td>
<td>USA ACGIH (ppm)</td>
<td>5 ppm</td>
</tr>
<tr>
<td></td>
<td>USA OSHA</td>
<td>OSHA STEL (ppm) (Vacated limits)</td>
<td>10 ppm</td>
</tr>
<tr>
<td></td>
<td>USA OSHA</td>
<td>OSHA Ceiling (ppm)</td>
<td>15 ppm</td>
</tr>
<tr>
<td></td>
<td>USA OSHA</td>
<td>OSHA Ceiling (ppm)</td>
<td>20 ppm</td>
</tr>
</tbody>
</table>

**Personal protective equipment** – Avoid all unnecessary exposure. At a minimum wear long sleeved cotton shirt buttoned at the collar and full length cotton pants. Synthetic fibers can melt and adhere to the skin when heated. Do not fold back or roll up cuffs.

**Hand protection** – Wear gloves that protect against thermal burns when handling hot material.

**Eye protection** – Chemical googles or safety glasses.

**Respiratory protection** – Not typically required. In those cases where exposures exceed occupational control limits a NIOSH approved respirator is recommended.

**Other information** – When using, do not eat, drink or smoke. Hands and/or face should be washed before and after breaks and at the end of each shift.

9. PHYSICAL AND CHEMICAL PROPERTIES

**OVERVIEW:**

- Brown to black fluid with Asphalt odor
- Exposure through inhalation and skin contact requires immediate medical attention.
- This material is a dispersion in which the continuous phase is water. As such, the material exhibits no flammability characteristics.
- Cured residue may produce combustible vapor in closed containers, emitting carbon dioxide, carbon monoxide, sulfur oxides and various hydrocarbons.
<table>
<thead>
<tr>
<th>State</th>
<th>Liquid(heated), Solid(ambient temperatures)</th>
<th>Flammability(solid, gas)</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Brown/black</td>
<td>Lower/ Upper Explosive Limits</td>
<td>N/A</td>
</tr>
<tr>
<td>Odor</td>
<td>Asphalt, petroleum</td>
<td>Vapor Pressure</td>
<td>N/A</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>N/A</td>
<td>Vapor Density</td>
<td>N/A</td>
</tr>
<tr>
<td>pH</td>
<td>N/A</td>
<td>Relative Density</td>
<td>N/A</td>
</tr>
<tr>
<td>Melting Point</td>
<td>N/A</td>
<td>Solubility</td>
<td>Water, Negligible</td>
</tr>
<tr>
<td>Freezing Point</td>
<td>N/A</td>
<td>Partition Coefficient</td>
<td>N/A</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>N/A</td>
<td>Auto-ignition Temp.</td>
<td>N/A</td>
</tr>
<tr>
<td>Flash Point</td>
<td>&gt;230°C</td>
<td>Decomposition Temp.</td>
<td>N/A</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>N/A</td>
<td>Viscosity</td>
<td>N/A</td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY

**Reactivity:** No specific data available.

**Chemical Stability:** Stable under normal storage and handling conditions.

**Possibility of Hazardous Reaction:** None under normal storage and handling conditions.

**Conditions to Avoid:** Extreme heat and open flames.

**Incompatible Materials:** Strong acids. Strong bases.

**Hazardous Decomposition Products:** Hydrogen sulfide and other toxic vapors may be given off when heated excessively. Carbon Monoxide. Carbon Dioxide

11. TOXICOLOGY INFORMATION

**Acute Toxicity:** Not Classified

<table>
<thead>
<tr>
<th>Asphalt (8052-42-4)</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>LD50 oral rat</td>
<td>&gt;5000 mg/kg</td>
</tr>
<tr>
<td>LD50 dermal rabbit</td>
<td>&gt;2000 mg/kg</td>
</tr>
</tbody>
</table>

**Skin corrosion/ irritation:** Not classified

**Serious eye damage/ irritation:** Not classified

**Respiratory or skin sensitization:** Not classified

**Germ cell mutagenicity:** Not classified

**Carcinogenicity:** Suspected of causing cancer
Asphalt (8052-42-4)
IARC 2B – Possibly Carcinogenic to Humans

Reproductive Toxicity: Not classified
Specific Target Organ Toxicity (Single Exposure): Not classified
Specific Target Organ Toxicity (Repeated Exposure): Not classified
Aspiration Hazard: Not classified

Potential Adverse Human Health Effects and Symptoms:
Vapors and gases from heated asphalt may contain hydrogen sulfide and may cause eye, skin and respiratory tract irritation, headache and nausea. Ingestion or contact of hot material may cause burns on eyes, skin or gastrointestinal system. Asphalt may cause skin irritation with reddening, itching, burning and/or swelling and may cause allergic skin reaction in some individuals.

12. ECOLOGICAL INFORMATION

Persistence and Degradability:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>PG Binders</td>
<td>Persistence and degradability</td>
</tr>
<tr>
<td>Asphalt (8052-42-4)</td>
<td>Persistence and degradability</td>
</tr>
</tbody>
</table>

PG Binders
Bioaccumulative potential | Not established

Asphalt (8052-42-4)
BCF fish 1 | (no bioaccumulation expected)
Log Pow | > 6
Bioaccumulative potential | Not established

Other Information: Avoid release to the environment.

13. DISPOSAL CONSIDERATIONS

Disposal Methods Recommendations: Dispose in a safe manner in accordance with local, state and federal regulations.

Ecology-Waste Materials: Avoid release to the environment
### TRANSPORT INFORMATION

In accordance with DOT Transportation document description:

<table>
<thead>
<tr>
<th>Description</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN3257 Elevated temperature liquid, n.o.s. (Asphalt) 9, III</td>
<td></td>
</tr>
</tbody>
</table>

**UN-No. (DOT):** 3257  
**DOT NA no.:** UN3257  
**DOT proper shipping name:** 9- Class 9-Miscellaneous hazard material 49 CFR 173.140  
**Hazard Label (DOT):** ![Hazard Label](image)  
**Dot Symbols:** 9- Class (Miscellaneous dangerous materials)  
G - Identifies PSN requiring a technical name  
**Packing Group:** III - Minor Danger  
**DOT Special (49 CFR 172.102):**  
IB1- Authorized IBC’s: Metal (31A, 31B and 31N). Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized.  
T3- 2.65 178.274(d)(2) Normal........ 178.275(d)(2)  
TP3- The maximum degree of filling (in %) for solids transported above their melting points and for elevated temperature liquids shall be determined by the following: Degree of filling = 95* dr/df Where: df and dr are the mean densities of the liquid at the mean temperature of the of the liquid during filling and the maximum mean bulk temperature during transport respectively.  
TP29- A portable tank having a minimum test pressure of 1.5 bar (150.0 kPa) may be used provided the calculated test pressure is 1.5 bar or less based on the MAWP of the hazardous materials, as defined in 178.275 of this subchapter, where the test pressure is 1.5 times the MAWP.  
**DOT Packaging Exceptions (49 CFR 173.xxx):** None  
**DOT Packaging Non Bulk (49 CFR 173.xxx):** None  
**DOT Packaging Bulk (49 CFR 173.xxx):** 247  
**DOT Quantity Limitations Passenger aircraft/ rail (49 CFR 173.27):** Forbidden  
**DOT Quantity Limitations Cargo aircraft only (49 CFR 173.75):** Forbidden  
**Dot Vessel Stowage Location:** A – The material may be stowed on deck or under deck on a cargo vessel and on a passenger vessel.
15. **REGULATORY INFORMATION**

<table>
<thead>
<tr>
<th><strong>PG Binders</strong></th>
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</thead>
<tbody>
<tr>
<td>SARA Section 311/312 Hazard Classes</td>
<td>Delayed (chronic) health hazard Immediate (acute) health hazard</td>
</tr>
</tbody>
</table>

**Asphalt (8052-42-4)**

- Listed on the United States TSCA (Toxic Substance Control Act) inventory.

**Asphalt (8052-42-4)**

- Listed on the Canadian DSL (Domestic Substances List) inventory.

**Asphalt (8052-42-4)**

- Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances) substances.

**Asphalt (8052-42-4)**

- Listed on the AlCS (Australian Inventory of Chemical Substances)
- Listed on the Inventory of Existing Chemical Substances (IECSC)
- Listed on the Japanese ENCS (Existing & New Chemicals Substances) inventory.
- Listed on the Korean ECL (Existing Chemical List) inventory.
- Listed on New Zealand- Inventory of Chemicals (NZIoC)
- Listed on Inventory of Chemicals and Chemical Substances (PICCS)

**Asphalt (8052-42-4)**

<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>Yes</td>
<td></td>
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</table>

16. **OTHER INFORMATION**

<table>
<thead>
<tr>
<th><strong>CARC. 2</strong></th>
<th><strong>CARCINOGENICITY CATEGORY 2</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>H351</strong></td>
<td><strong>SUSPECTED OF CAUSING CANCER</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>HEALTH</strong></th>
<th><strong>FLAMMABILITY</strong></th>
<th><strong>PHYSICAL</strong></th>
<th><strong>PERSONAL PROTECTION</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><em>CHRONIC HAZARD 1 SLIGHT ACUTE HAZARD</em></td>
<td>1 SLIGHT HAZARD</td>
<td>0 MINIMAL HAZARD</td>
<td>X</td>
</tr>
</tbody>
</table>

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