Hanover® Paver Mastic

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier
Product form : Mixture
Product name : Hanover® Paver Mastic

1.2. Relevant identified uses of the substance or mixture and uses advised against
Use of the substance/mixture : Brick/Stone Adhesive

1.3. Details of the supplier of the safety data sheet
Hanover Architectural Products
5000 Hanover Road
Hanover, PA 17331
717-637-0500

1.4. Emergency telephone number
Emergency number : INFOTRAC 800.535.5053 (Outside the U.S., call collect 1.352.323.3500)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture
Classification (GHS-US)
Flam. Liq. 3 H226
Carc. 2 H351

2.2. Label elements
GHS-US labeling
Hazard pictograms (GHS-US) :

![GHS02](image)
![GHS08](image)

Signal word (GHS-US) : Warning
Hazard statements (GHS-US) :
H226 - Flammable liquid and vapor
H351 - Suspected of causing cancer

Precautionary statements (GHS-US) :
P201 - Obtain special instructions before use
P202 - Do not handle until all safety precautions have been read and understood
P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking
P233 - Keep container tightly closed
P240 - Ground/bond container and receiving equipment
P241 - Use explosion-proof equipment
P242 - Use only non-sparking tools
P243 - Take precautionary measures against static discharge
P280 - Wear protective equipment
P303+P361+P353 – If on skin (or hair). Remove/ Take off immediately all contaminated clothing.
Rinse skin with water/shower
P308+P313 – If exposed or concerned: Get medical advice/attention
P403+P235 – Store in a well-ventilated place. Keep cool

2.3. Other hazards
Other hazards not contributing to the classification : 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.

2.4. Unknown acute toxicity (GHS-US)
None of the ingredients in the mixture are of unknown toxicity

SECTION 3: Composition/information on ingredients

3.1. Substance
Not applicable – product is a mixture
SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general
Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the product label where possible). Suspected of causing cancer.

First-aid measures after inhalation
Allow victim to breathe fresh air. Allow the victim to rest.

First-aid measures after skin contact
Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. For hot product, immediately immerse in or flush the affected area with large amounts of cold water to dissipate heat. Cover with clean cotton sheeting or gauze and seek medical attention. No attempt should be made to remove material from skin.

First-aid measures after eye contact
Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persist.

First-aid measures after ingestion
Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

4.2. Most important symptoms and effects, both acute and delayed
No additional information available

4.3. Indication of any immediate medical attention and special treatment needed
No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Unsuitable extinguishing media
Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard
Flammable liquid and vapor.

Explosion hazard
May form flammable/explosive vapor-air mixture.

5.3. Advice for firefighters

Firefighting instructions
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.

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

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures
Remove ignition sources. Use special care to avoid static electric charges. No open flames. No smoking.

6.1.1. For non-emergency personnel
Emergency procedures
Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment
Equip cleanup crew with proper protection.

Emergency procedures
Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up
Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.
SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed: Handle empty containers with care because residual vapors are flammable.
Precautions for safe handling: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor. No open flames. No smoking. Take precautionary measures against static discharge. Use only non-sparking tools. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures: Proper grounding procedures to avoid static electricity should be followed. Ground/bond container and receiving equipment. Use explosion-proof equipment.
Storage conditions: Keep only in the original container in a cool, well ventilated place away from oxidizers, excessive heat, and open flame. Keep container tightly closed.
Incompatible products: Strong bases. Strong acids.
Incompatible materials: Sources of ignition. Direct sunlight. Heat sources.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

<table>
<thead>
<tr>
<th>Material</th>
<th>ACGIH TWA (mg/m³)</th>
<th>ACGIH TWA (ppm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asphalt (8052-42-4)</td>
<td>0.5 mg/m³ Inhalable fraction</td>
<td>1 ppm</td>
</tr>
<tr>
<td>Hydrogen Sulfide (7783-06-4) may be released from this product</td>
<td></td>
<td></td>
</tr>
<tr>
<td>USA ACGIH</td>
<td>ACGIH TWA (ppm)</td>
<td>5 ppm</td>
</tr>
<tr>
<td>USA OSHA</td>
<td>OSHA PEL (ppm) (Vacated limits)</td>
<td>10 ppm</td>
</tr>
<tr>
<td>USA OSHA</td>
<td>OSHA STEL (ppm) (Vacated limits)</td>
<td>15 ppm</td>
</tr>
<tr>
<td>USA OSHA</td>
<td>OSHA Ceiling (ppm)</td>
<td>20 ppm</td>
</tr>
</tbody>
</table>

8.2. Exposure controls

Appropriate engineering controls: Ensure that proper ventilation is provided to maintain exposures below regulated limits.
Personal protective equipment: Avoid all unnecessary exposure. At a minimum wear long-sleeved cotton shirt buttoned at the collar and full-length pants. Synthetic fibers can melt and adhere to the skin when heated. Do not fold back or roll up cuffs.
Hand protection: Wear protective gloves that protect against thermal burns when handling hot material.
Eye protection: Chemical goggles or safety glasses.
Respiratory protection: Not typically required. In cases where exposures exceed occupational control limits a NIOSH approved respirator is recommended. Wear appropriate mask.
Other information: Do not eat, drink or smoke during use. Wash hands and other exposed areas after use.

SECTION 9: Physical and chemical properties

9.1. 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>Liquid</td>
</tr>
<tr>
<td>Color</td>
<td>Black</td>
</tr>
<tr>
<td>Odor</td>
<td>Organic</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative evaporation rate (butyl acetate=1)</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting point</td>
<td>No data available</td>
</tr>
<tr>
<td>Freezing point</td>
<td>No data available</td>
</tr>
<tr>
<td>Boiling point</td>
<td>343.33 °C</td>
</tr>
<tr>
<td>Flash point</td>
<td>43.33 °C</td>
</tr>
</tbody>
</table>
### Safety Data Sheet

**Hanover® Paver Mastic**

**According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auto-ignition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative vapor density at 20 °C</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative density</td>
<td>No data available</td>
</tr>
<tr>
<td>Solubility</td>
<td>No data available</td>
</tr>
<tr>
<td>Log Pow</td>
<td>No data available</td>
</tr>
<tr>
<td>Log Kow</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, kinematic</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, dynamic</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Oxidizing properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosive limits</td>
<td>No data available</td>
</tr>
</tbody>
</table>

**9.2. Other information**

No additional information available

**SECTION 10: Stability and reactivity**

**10.1. Reactivity**

No additional information available

**10.2. Chemical stability**

Flammable liquid and vapor. May form flammable/explosive vapor-air mixture.

**10.3. Possibility of hazardous reactions**

Not established.

**10.4. Conditions to avoid**


**10.5. Incompatible materials**

Strong acids. Strong bases.

**10.6. Hazardous decomposition products**

Carbon monoxide. Carbon dioxide. May release flammable gases.

**SECTION 11: Toxicological information**

**11.1. Information on toxicological effects**

<table>
<thead>
<tr>
<th>Source</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Likely routes of exposure</td>
<td>Skin and eye contact; Inhalation</td>
</tr>
<tr>
<td>Acute toxicity</td>
<td>Not classified</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Route</th>
<th>Value</th>
</tr>
</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>

<table>
<thead>
<tr>
<th>Category</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin corrosion/irritation</td>
<td>Not classified</td>
</tr>
<tr>
<td>Serious eye damage/irritation</td>
<td>Not classified</td>
</tr>
<tr>
<td>Respiratory or skin sensitization</td>
<td>Not classified</td>
</tr>
<tr>
<td>Germ cell mutagenicity</td>
<td>Not classified</td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>Suspected of causing cancer.</td>
</tr>
</tbody>
</table>

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

| IARC group                          | 2B - Possibly carcinogenic to humans |
| National Toxicity Program (NTP) Status | 5 - Twelfth Report - Items under consideration |

<table>
<thead>
<tr>
<th>Category</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reproductive toxicity</td>
<td>Not classified</td>
</tr>
<tr>
<td>Specific target organ toxicity (single exposure)</td>
<td>Not classified</td>
</tr>
<tr>
<td>Specific target organ toxicity (repeated exposure)</td>
<td>Not classified</td>
</tr>
<tr>
<td>Aspiration hazard</td>
<td>Not classified</td>
</tr>
</tbody>
</table>
PORTLAND MASONRY MATERIALS

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.

SECTION 12: Ecological information

12.1. Toxicity
No additional information available

12.2. Persistence and degradability

| Hanover® Paver Mastic
| Persistence and degradability | Not established.
| Asphalt (8052-42-4)
| Persistence and degradability | Not established.

12.3. Bioaccumulative potential

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

12.4. Mobility in soil
No additional information available

12.5. Other adverse effects
Other information: Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods
Waste disposal recommendations: Dispose in a safe manner in accordance with local, state, and federal regulations.
Additional information: Handle empty containers with care because residual vapors are flammable.
Ecology - waste materials: Avoid release to the environment.

SECTION 14: Transport information

In accordance with DOT
Transport document description: UN1993 Flammable liquids, n.o.s., 3, III
UN-No.(DOT): 1993
DOT NA no.: UN1993
Proper Shipping Name (DOT): Flammable liquids, n.o.s.
Hazard Classes (DOT): 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120
Hazard labels (DOT): 3 - Flammable liquid

DOT Symbols: G - Identifies PSN requiring a technical name
Packing group (DOT): III - Minor Danger
Hanover® Paver Mastic

Safety Data Sheet
according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

DOT Special Provisions (49 CFR 172.102):
- B1 - If the material has a flash point at or above 38 °C (100 F) and below 93 °C (200 F), then the bulk packaging requirements of 173.241 of this subchapter are applicable. If the material has a flash point of less than 38 °C (100 F), then the bulk packaging requirements of 173.242 of this subchapter are applicable.
- B52 - Notwithstanding the provisions of 173.24b of this subchapter, non-reclosing pressure relief devices are authorized on DOT 57 portable tanks.
- IB3 - Authorized IBCs: Metal (31A, 31B and 31N), Rigid plastics (31H1 and 31H2); Composite (31H21 and 31HA2, 31HB2, 31HN2, 31HD2 and 31HH2). Additional Requirement: 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 65 °C (1.3 bar at 151 °F) are authorized, except for UN2672 (also see Special Provision IP8 in Table 2 for UN2672).
- T4 - 2.65 178.274(d)(2) Normal. 178.275(d)(3)
- TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling = 97 / (1 + a (tr - tf)) Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling.
- 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): 150
DOT Packaging Non Bulk (49 CFR 173.xxx): 203
DOT Packaging Bulk (49 CFR 173.xxx): 242
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27): 60 L
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75): 220 L
DOT Vessel Stowage Location: A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel.

Additional information:

ADR
No additional information available

Transport by sea
No additional information available

Air transport
No additional information available

SECTION 15: Regulatory information
15.1. US Federal regulations
- Hanover® Paver Mastic
- SARA Section 311/312 Hazard Classes
  - Delayed (chronic) health hazard
  - Fire hazard

- Asphalt (8052-42-4)
  - Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. International regulations

CANADA
- Asphalt (8052-42-4)
  - Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations
- Asphalt (8052-42-4)
  - Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

Classification according to Regulation (EC) No. 1272/2008 [CLP]
No additional information available

04/22/2015 EN (English US)
15.2.2. National regulations

Asphalt (8052-42-4)
Listed on the AICS (Australian Inventory of Chemical Substances)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
Listed on the Korean ECL (Existing Chemicals List)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

15.3. US State regulations

California - Proposition 65
WARNING: This product contains chemicals known to the State of California to cause cancer.

SECTION 16: Other information

Other information : None.

Full text of H-phrases:

<table>
<thead>
<tr>
<th>Carc. 2</th>
<th>Carcinogenicity Category 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flam. Liq. 3</td>
<td>Flammable liquids Category 3</td>
</tr>
<tr>
<td>H226</td>
<td>Flammable liquid and vapor</td>
</tr>
<tr>
<td>H351</td>
<td>Suspected of causing cancer</td>
</tr>
</tbody>
</table>

SDS US (GHS HazCom 2012)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.