Asphalt Repair Products

SAFETY DATA SHEET
(Complies with OSHA 29 CFR 1910.1200)

SECTION I: PRODUCT IDENTIFICATION

QPR
One Securities Centre
3490 Piedmont Road, Suite 1300
Atlanta, GA 30305
Emergency Telephone Number
(800) 282-5828

Information Telephone Number
(800) 388-4338

Revision: Jun-15

Permanent Blacktop Repair

Product Use: Construction Material

SECTION II - HAZARD IDENTIFICATION

Classification of the substance or mixture
- Skin Irritation – Category 2
- Eye Irritation – Category 2
- Carcinogenicity – Category 2
- Acute Toxicity – Oral – Category 4
- Acute Toxicity – Inhalation – Category 4
- Specific Target Organ Toxicity – Repeated Exposure – Category 2

Signal word DANGER

Hazard pictograms

Hazard-determining components of labeling: Asphalt

Hazard Statements
- Suspected of causing cancer through prolonged or repeated exposure.
- Causes skin irritation.
- Causes eye irritation.
- Harmful if swallowed.
Harmful if inhaled.  
May cause respiratory irritation

Do not handle until all safety precautions have been read and understood.  
Wear impervious gloves, such as nitrile. Wear eye protection, and protective clothing.  
Do not eat, drink or smoke when using this product.  
Wash thoroughly after handling.  
Use only in a well-ventilated area.  
Do not breathe fumes.

If swallowed: Rinse mouth.  Do NOT induce vomiting.  
If inhaled:  Remove person to fresh air and keep comfortable for breathing.  
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.  Continue rinsing.  
If on skin (or hair): Remove immediately all contaminated clothing and wash before re-use. Rinse skin or hair with water.  
If significant skin irritation or rash occurs: get medical advice or attention.

Immediately seek medical advice or attention if symptoms are significant or persist.

Store in a well-ventilated place. Keep container tightly closed.  
Dispose of contents/containers in accordance with all regulations.

2.3 Additional Information

2.3a HNOC – Hazards not otherwise classified:  Not applicable

2.3b Unknown Acute Toxicity:  None

2.3C WHMIS Classification  
Class D2B – Skin/Eye Irritant  
Class D2A – Chronic Toxic Effects – Carcinogen

2.3d Label Elements According To WHMIS  
Hazard Symbols

Signal Word  
DANGER!
SECTION III - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

<table>
<thead>
<tr>
<th>Hazardous Components</th>
<th>CAS No.</th>
<th>% by Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asphalt Cement</td>
<td>8052-42-4</td>
<td>1-5</td>
</tr>
<tr>
<td>Diesel Fuel</td>
<td>68476-34-6</td>
<td>1-5</td>
</tr>
<tr>
<td>Sand, Silica, Quartz</td>
<td>14808-60-7</td>
<td>95-100</td>
</tr>
</tbody>
</table>

*The concentrations ranges are provided due to batch-to-batch variability.

SECTION IV – FIRST AID MEASURES

**General information:**
Immediately remove any clothing soiled by the product. In case of unconsciousness place patient stably in side position for transportation. Never give anything by mouth to an unconscious person.

**After inhalation:** Vapor may cause nose, throat or lung irritation depending on the degree of exposure. Remove to fresh air. If breathing is irregular or stopped, administer artificial respiration. Seek medical attention immediately.

**After skin contact:** Contact with hot product will cause severe thermal burns. Cool skin rapidly with cold water after contact. Do NOT ATTEMPT TO REMOVE PRODUCT. Seek medical attention immediately.

**After eye contact:** Cool with cold water and seek medical attention immediately.

**After ingestion:** Immediately call a doctor. Do NOT induce vomiting unless advised to by medical professionals. Drink copious amounts of water and provide fresh air.

**Acute/Delayed Symptoms:** None known

SECTION V - FIRE FIGHTING MEASURES

**Suitable extinguishing agents:** Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Special hazards arising from the substance or mixture:** No further relevant information available.

**Protective equipment:** Firefighters should wear NIOSH/MSHA approved self-contained breathing apparatus and full protective clothing.

**Flammability of the Product:** HMIS Rating - 1

**Flash Points:** Cleveland Open Cup (ASTM D92) >300°F (>149°C)

**Products of Combustion:** Carbon monoxide, carbon dioxide and potentially hydrogen sulfide gas.

**Fire Hazards in Presence of Various Substances:** Non-flammable.

**Explosion Hazards in Presence of Various Substances:** Non-explosive in presence of shocks

**Special Remarks on Fire Hazards:** Black, dense, hazy smoke forms during burning. Keep sparks away from concentrated fumes.
SECTION VI – ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures: Wear protective equipment (See section 8). Keep unprotected persons away and remove or secure all ignition sources.

Environmental precautions: Do not allow to enter sewers/ surface or ground water.

Methods and material for containment and cleaning up:
Allow material to cool to a solid form, cover with earth to reduce adhesiveness, place in appropriate containers for transport. Dispose contaminated material as waste according to section 13. Ensure adequate ventilation.

Reference to other sections
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND STORAGE

Handling
Precautions for safe handling: Ensure good ventilation/exhaustion at the workplace. Wear appropriate PPE (See section 8).

Information about protection against explosions and fires: No special measures required.

Storage
Requirements to be met by storerooms and receptacles: No special requirements.

Information about storage in one common storage facility: Not required.

Further information about storage conditions: Keep receptacle tightly sealed.

Specific end use(s): No further relevant information available

SECTION VIII – EXPOSURE CONTROL MEASURES / PERSONAL PROTECTION

Components with limit values that require monitoring at the workplace:

<table>
<thead>
<tr>
<th>List</th>
<th>Component</th>
<th>CAS No.</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACGIH</td>
<td>Asphalt</td>
<td>8052-42-4</td>
<td>TWA</td>
<td>0.5 mg/m³</td>
</tr>
<tr>
<td>ACGIH</td>
<td>Silica Sand, crystalline</td>
<td>14808-60-7</td>
<td>TWA</td>
<td>0.025 mg/m³ (resp)</td>
</tr>
</tbody>
</table>

Additional information: The lists that were valid during the creation were used as basis.

General protective and hygienic measures: Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. DO NOT use gasoline, kerosene, solvents or harsh abrasive skin cleaners to clean skin. Avoid contact with the eyes and skin. Use a full-body heat resistant or internally cooled suit when work conditions dictate.
Personal Protective Equipment
Protection of hands:
Wear leather or heat-resistant gloves of adequate length if handling heated material. With product at ambient temperatures, use chemical resistant gloves such as heavy nitrile.

Eye protection:
Use a full-face shield and chemical safety goggles. With product at ambient temperatures, safety glasses equipped with side shields are recommended.

Respiratory protection:
Contaminant air concentrations determine the level of respiratory protection required. Use only NIOSH-approved respiratory equipment within the limits of the protection factors for that equipment. Use supplied air respirators when H₂S concentrations are expected to exceed applicable workplace exposure levels. Do not use air purifying respiratory equipment when considering elevated H₂S concentrations. Respiratory equipment must be selected on the basis of the maximum expected air concentration.

SECTION IX - PHYSICAL/CHEMICAL CHARACTERISTICS

General Information
Appearance
Form: Solid at 25°C / Liquid above 135°C
Color: Black
Odor: Asphalctic

Boiling point/Boiling range: NA
Flash point: >300°F (>149°C)
Auto igniting: NA
Relative Density at 25°C (77°F) 1.0 - 1.3
Solubility in / Miscibility with
Water: Insoluble
VOC content: 0 g/L VOC

SECTION X – STABILITY AND REACTIVITY

Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
Incompatible materials: Strong oxidizing agents
Hazardous decomposition products: When heated, may liberate hydrogen sulfide. Combustion may produce various oxides of carbon (CO, CO₂…)

SECTION XI – TOXICOLOGICAL INFORMATION
Inhalation: No significant adverse health effects are expected to occur upon short-term exposure to this product at ambient temperatures. Asphalt fumes have been associated with irritation of eyes nose and throat. Also, lower respiratory effects have been reported. Hydrogen sulfide (H₂S) can evolve when this product is stored or handled at elevated temperatures. H₂S can cause respiratory irritation and hypoxia. At low concentrations, H₂S has an odor of rotten eggs. At higher concentrations, H₂S odor is not apparent. DO NOT use odor as an indicator of exposure to H₂S. Inhalation of high concentrations of H₂S may be fatal.

Skin irritation: Heated asphalt can cause burns to the skin. May cause skin irritation with redness, an itching or burning feeling, and swelling of the skin. Exposure to sunlight and to asphalt vapors may amplify tendency for sunburns.

Eye irritation: Heated asphalt can cause burns to the eyes. Mists, vapors or fumes from this material can cause eye irritation with tearing, redness, or a stinging or burning feeling.

Ingestion: Contact with heated asphalt may cause burns. If asphalt at ambient temperatures is swallowed, no significant adverse health effects are anticipated. If swallowed in large quantities, asphalt can obstruct the intestine.

Further information: Heated asphalt could release hydrogen sulfide gas. Toxic amounts H₂S could accumulate inside vessels containing heated asphalt.

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS No.</th>
<th>Acute oral toxicity: LD50 rat</th>
<th>Acute dermal toxicity: LD50 rat</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asphalt</td>
<td>8052-42-4</td>
<td>Dose: 5,001 mg/kg</td>
<td>Dose: 2,001 mg/kg</td>
</tr>
</tbody>
</table>

Component

NTP

This product, Asphalt (CAS-No.: 8052-42-4), may contain trace amounts of benzene a chemical known to cause cancer.

IARC

Asphalt (Bitumen) (CAS-No.: 8052-42-4) Group 2B possibly carcinogenic to humans

OSHA

This product, Asphalt (CAS-No.: 8052-42-4), may contain trace amounts of benzene a chemical known to cause cancer.

SECTION XII – ECOLOGICAL INFORMATION

Aquatic toxicity: No further relevant information available.
Persistence and degradability: No further relevant information available.
Behavior in environmental systems:
Bioaccumulative potential: No further relevant information available.
Additional ecological information:
General notes:
Analysis for ecological effects has not been conducted on this product. Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system. Spills into waterways may be harmful to organisms and bottom feeders.

SECTION XIII – DISPOSAL CONSIDERATIONS

Waste treatment methods
Recommendation: Do not allow product to reach waterways or storm sewers. Disposal must be made in accordance with local, state and federal regulations (see 40CFR 260 through 40 CFR 271).
Uncleaned packaging
Recommendation: Disposal must be made in accordance with local, state and federal regulations.

SECTION XIV – TRANSPORT INFORMATION

CFR
Proper shipping name: Elevated temperature liquid, n.o.s. (Asphalt)
UN-No. : 3257
Class: 9
Packing group: III
Hazard inducer: (Asphalt)

TDG
Proper shipping name: Elevated temperature liquid, n.o.s. (Asphalt)
UN-No. : 3257
Class: 9
Packing group: III
Hazard inducer: (Asphalt)

IMDG-Code
UN-No. : 3257
Description of the goods: Elevated temperature liquid, n.o.s. (Asphalt)
Class: 9
Packaging group: III
IMDG-Labels: 9
EmS Number: F-A S-P
Marine pollutant: No

SECTION XV – OTHER REGULATORY INFORMATION

UNITED STATES (FEDERAL AND STATE)
TSCA Status: Appears on the EPA TSCA inventory

SARA 302/311/312/313 Components: Acute Health Hazard: Asphalt (CAS No. 8052-42-4)
California Prop. 65 Components
This product contains chemicals known to State of California to cause cancer and birth defects or other reproductive harm.

CANADA
DSL Status
All components of this product are on the Canadian DSL list.

WHMIS Classification: Not regulated by the Controlled Products Regulations (CPR) or Health Canada’s Workplace Hazardous Material Information (WHMIS). This document complies with the WHMIS requirements of the Hazardous Products Act (HPA) and the CPR.

SECTION XVI – OTHER INFORMATION

Abbreviations and acronyms:
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
CAS: Chemical Abstract Service
RID: Regalement international concern ant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
ICAO: International Civil Aviation Organization
ACGIH: American Conference of Governmental Industrial Hygienists
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
VOC: Volatile Organic Compounds (USA, EU)
CERCLA: Comprehensive Environmental Response, Compensation and Liability Act
CFR: Code of Federal Regulations
CPR: Controlled Products Regulations (Canada)
DOT: Department of Transportation
IARC: International Agency for Research
NIOSH: National Institute for Occupational Safety and Health
NTP: National Toxicity Program
OSHA: Occupational Safety and Health Administration
PEL: Permissible Exposure Limit
RCRA: Resource Conservation and Recovery Act
SARA: Superfund Amendments and Reauthorization Act
TLV: Threshold Limit Value
TWA: Time-weighted Average
WHMIS: Workplace Hazardous Material Information System
Last Updated: June 1, 2015

NOTE:  The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, express or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to silica contained in our products. End of SDS.