

# Material Safety Data Sheet

## "Paving Grade Bitumen"

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### Section 1 : Product and Company Identification

**Product Name:** 40-50, 60-70, 80-100 and other Penetration Grade  
Bitumen

**Supplier:** MTA

**Updated:** 26 April 2016

**CAS Number:** Mixture - not applicable

**UN Number:** 1999

**Telephone:** (0098)21 26203100

### Section 2 : Hazards Identification

**Effects of Overexposure:**

No significant effects expected.

**Emergency Response Data**

Black semi-solid. Avoid ignition sources. DOT ERG No. – NA

See Section 10 for additional Biological Hazards (if applicable).

### Section 3 : First Aid Measures

**Eye Contact:**

Flush thoroughly with water. If irritation occurs, call a doctor.

**Skin Contact:**

If burned by contact with hot material, cool molten material adhering to skin as quickly as possible with water, and see a doctor for removal of adhering material and treatment of burn. Wash contact areas with soap and water.

**Inhalation:**

Remove from further exposure. If respiratory irritation, dizziness, nausea, or unconsciousness occurs, seek immediate medical assistance and call a doctor. If breathing has stopped, use mouth-to-mouth resuscitation.

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### **Ingestion:**

Not expected to occur in normal industrial use.

## **Section 4 : Fire-Fighting Measures**

### **Extinguishing media:**

Carbon Dioxide, foam, dry chemical.

### **Special fire-fighting procedures:**

Water or foam may cause frothing. Use water to keep fire exposed containers cool. Water spray may be used to flush spills away from exposure. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply.

### **Special protective equipment:**

For fires in enclosed areas, fire fighters must use self-contained breathing apparatus.

### **Unusual fire and explosion hazards:**

Avoid ignition sources. Flash Point °C: >250 (ASTM D-92). Flammable limits - LEL: NA, UEL: NA.

### **NFPA hazard ID:**

Health: 1

Flammability: 1

Reactivity: 0

### **Hazardous decomposition products:**

Sulphur oxides. Hydrogen sulphide. Carbon monoxide.

## **Section 5 : Accidental Release Measures**

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### Notification procedures:

Report spills as required to appropriate authorities.

### Procedures if material is released or spilled:

Shovel up and dispose of at an appropriate waste disposal facility in accordance with current applicable laws and regulations, and product characteristics at time of disposal.

### Environmental precautions:

Prevent spills from entering storm sewers or drains and contact with soil.

### Personal precautions:

See Section 9

## Section 6 : Handling and Storage

### Handling:

Trace amounts of Hydrogen Sulphide may be present. Keep face clear of tank and/or tank car openings.

### Storage:

Do not store in open or unlabelled containers. Store away from strong oxidizing agents or combustible material.

## Section 7 : Physical and Chemical Properties

Typical physical characteristics are given below. Consult Product Data Sheet for specific details.

<b>Appearance:</b>	Semi-solid
<b>Color:</b>	Dark Brown
<b>Odor:</b>	Asphaltic
<b>Odor Threshold -ppm:</b>	NA
<b>pH:</b>	NA
<b>Boiling point °C:</b>	NA
<b>Melting point °C:</b>	NA

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<b>Flash point °C:</b>	>250 (ASTM D-92)
<b>Flammability:</b>	NA
<b>Auto flammability:</b>	NE
<b>Explosive properties:</b>	NA
<b>Oxidizing properties:</b>	NA
<b>Evaporation rate:</b>	NA
<b>Density 20°C, kg/l:</b>	1.03
<b>Solubility in water:</b>	Negligible
<b>Partition coefficient:</b>	NE
<b>Pour point °C</b>	NE
<b>Freezing point °C:</b>	NE

NA = Not Applicable, NE = Not Established, D = Decomposes

### Section 8 : Stability and Reactivity

#### Stability (thermal, light, etc.):

Stable

#### Conditions to avoid:

Overheating may result in thermal cracking and produce flammable vapors.

#### Incompatibility (materials to avoid):

Strong oxidizers and water.

#### Hazardous Decomposition Products:

Sulphur oxides. Hydrogen sulphide. Carbon monoxide.

#### Hazardous polymerization:

Will not occur.

### Section 9 : Exposure Controls / Personal Protection

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### **Ventilation:**

Use in well-ventilated area.

### **Respiratory protection:**

Use approved respiratory protection in confined or enclosed spaces when handling hot product or when hydrogen sulphide and/or asphalt fumes exceed permissible limits.

### **Eye protection:**

Generally eye contact with solid material is unlikely, however, when handling in liquid form; chemical type goggles should be worn.

### **Skin protection:**

Use chemical-resistant apron and/or other clothing to protect against hot liquid and to avoid skin contact.

## Section 10 : Toxicological Data

### **Acute toxicology:**

- **Oral toxicity (rats):**

Practically non-toxic (LD50: greater than 2000 mg/kg). Based on testing of similar products and/or the components.

- **Dermal toxicity (rabbits):**

Practically non-toxic (LD50: greater than 2000 mg/kg). Based on testing of similar products and/or the components.

- **Inhalation toxicity (rats):**

Not established.

- **Eye irritation (rabbits):**

Practically non-irritating. (Draize score: 0 or greater but 6 or less). Based on testing of similar products and/or the components.

- **Skin irritation (rabbits):**

Practically non-irritating. (Primary Irritation Index: 0.5 or less). Based on testing of similar products and/or the components.

### **Other toxicology data:**

Some asphalt may contain polycyclic aromatic compounds (PACs). The TLV of 5mg/m<sup>3</sup> is believed to be adequate to protect workers exposed to asphalt fumes. Trace amounts of Hydrogen Sulphide, a toxic gas, may be present when this material is handled in liquid form. Keeps face clear of tank and/or

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tank car opening.

**Section 11 : Ecological Information**

**Environmental fate and effects:**

Not established.

**Section 12 : Disposal Considerations**

**Waste disposal:**

Dispose of waste at an appropriate waste disposal facility in accordance with current applicable laws and regulations, and product characteristics at time of disposal.

**Section 13 : Other Information**

**Use:**

Highway Construction