



Material Safety Data Sheet (MSDS)

Bitumen 85/100

Section 1: Product Identification

Product Name: Bitumen 85/100

Product Type: Penetration Grade Bitumen

Synonyms: Asphalt Cement 85/100, Paving Grade Bitumen

Recommended Use: Road construction, asphalt paving, waterproofing, roofing applications, pavement maintenance, and industrial use.

Section 2: Hazard Identification

GHS Classification

- Not classified as hazardous in solid form.
- Heated bitumen may cause severe thermal burns.
- Fumes generated during heating may irritate the eyes and respiratory tract.

Hazard Statements

- Causes severe burns when hot.
- Vapors may cause respiratory irritation.
- Contact with hot product may result in permanent skin injury.

Precautionary Statements

- Avoid breathing fumes.
- Wear suitable protective equipment.
- Keep away from ignition sources.
- Handle only in well-ventilated areas.

Section 3: Composition / Information on Ingredients

Component	CAS Number	Concentration
Petroleum Bitumen	8052-42-4	100%

No hazardous additives are intentionally added.

Section 4: First Aid Measures

Eye Contact

- Cold product: Flush with clean water.
- Hot product: Immediately cool with cold water for at least 15 minutes.
- Do not attempt to remove hardened bitumen from the eye.
- Obtain immediate medical attention.

Skin Contact

- Cold product: Wash with soap and water.
- Hot product: Cool affected area immediately with cold water.
- Do not remove solidified bitumen from skin.
- Seek urgent medical treatment.

**Inhalation**

- Move the affected person to fresh air.
- Keep warm and at rest.
- Seek medical attention if symptoms persist.

Ingestion

- Not normally expected.
- Do not induce vomiting.
- Seek medical advice immediately.

Section 5: Fire Fighting Measures**Suitable Extinguishing Media**

- Dry chemical powder
- Carbon dioxide (CO₂)
- Foam
- Sand

Unsuitable Extinguishing Media

- Direct water jet

Hazardous Combustion Products

- Carbon monoxide (CO)
- Carbon dioxide (CO₂)
- Sulfur oxides
- Dense black smoke

Protective Equipment

Firefighters should wear self-contained breathing apparatus (SCBA) and full protective clothing.

Section 6: Accidental Release Measures

- Allow hot material to cool before handling.
- Prevent entry into drains and waterways.
- Collect solidified material mechanically.
- Dispose according to local environmental regulations.

Section 7: Handling and Storage**Handling**

- Avoid skin and eye contact.
- Prevent overheating.
- Ensure adequate ventilation.
- Use insulated equipment for hot material.

Storage

- Store in clean, dry tanks or containers.
- Keep away from oxidizing agents.
- Recommended storage temperature:
140–160°C
- Avoid prolonged heating above **190°C**.



Section 8: Exposure Controls / Personal Protection

Engineering Controls

- Local exhaust ventilation
- Adequate workplace ventilation

Personal Protective Equipment

Eyes

- Safety goggles
- Face shield

Hands

- Heat-resistant gloves

Body

- Long-sleeved protective clothing
- Heat-resistant boots

Respiratory Protection

- Respirator if ventilation is inadequate or fumes exceed occupational exposure limits.

Section 9: Physical and Chemical Properties

Property	Value
Appearance	Black solid or semi-solid
Odor	Mild petroleum odor
Penetration	85–100 dmm
Softening Point	45–52°C
Flash Point	>230°C
Density (25°C)	Approximately 1.01–1.06 g/cm ³
Solubility in Water	Insoluble
Auto-Ignition Temperature	>300°C

Section 10: Stability and Reactivity

Stability

Stable under recommended storage conditions.

Conditions to Avoid

- Excessive heating
- Open flames
- Sparks
- Strong oxidizing agents

Hazardous Decomposition Products

- Carbon monoxide
- Carbon dioxide
- Sulfur oxides
- Hydrocarbon fumes



Section 11: Toxicological Information**Acute Toxicity**

Low toxicity under normal handling conditions.

Skin Contact

Hot material causes severe thermal burns.

Eye Contact

Hot material may cause serious eye injury.

Inhalation

Prolonged exposure to fumes may irritate the respiratory tract.

Chronic Effects

Repeated exposure to excessive fumes may cause respiratory discomfort.

Section 12: Ecological Information

- Insoluble in water.
 - Expected to have low mobility in soil after cooling.
 - Avoid release into rivers, lakes, and drainage systems.
 - Not readily biodegradable.
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Section 13: Disposal Considerations

Dispose of unused product and contaminated packaging according to local, regional, and national regulations.

Do not discharge into drains or natural water bodies.

Section 14: Transport Information

Bitumen 85/100 is generally transported while heated.

Item	Information
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UN Number	Not regulated when transported cold
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Shipping Name	Heated Bitumen (when applicable)
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Hazard Class	Depends on transport temperature and applicable regulations
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Packing Group	Not applicable
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Follow ADR, IMDG, or local transport regulations when transporting heated material.

Section 15: Regulatory Information

Comply with applicable national and international regulations governing petroleum products, occupational safety, environmental protection, and transportation.

Section 16: Other Information**Typical Applications**

- Asphalt pavement production
- Highway construction
- Road maintenance



- Airport pavements
- Parking areas
- Industrial paving
- Waterproofing systems

Recommended Working Temperature

- Storage: **140–160°C**
- Mixing: **150–170°C**
- Compaction: **130–150°C**

