



Material Safety Data Sheet (MSDS)

Bitumen 50/70

Section 1: Product Identification

Product Name: Bitumen 50/70

Product Type: Penetration Grade Bitumen

Recommended Use: Road construction, asphalt production, pavement works, waterproofing, industrial applications.

Manufacturer/Supplier: BASEKIM

Emergency Contact: Available upon request.

Section 2: Hazard Identification

GHS Classification

Bitumen 50/70 is generally **not classified as hazardous** in its solid state. However, when heated, it may cause thermal burns and release irritating fumes.

Potential Hazards

- Hot product may cause severe skin burns.
- Vapors generated during heating may irritate the eyes and respiratory system.
- Contact with molten bitumen may result in serious injury.
- Slippery when spilled.

GHS Precautionary Statements

- Avoid breathing fumes.
- Avoid contact with hot material.
- Wear appropriate protective equipment.
- Use only in well-ventilated areas.
- Keep away from excessive heat and open flames.

Section 3: Composition / Information on Ingredients

Component	CAS Number	Content
Petroleum Bitumen	8052-42-4	>99%

Contains no hazardous additives under normal conditions.

Section 4: First Aid Measures

Eye Contact

If exposed to fumes, rinse eyes thoroughly with clean water for at least 15 minutes.

If hot material enters the eye, seek immediate medical attention. Do not attempt to remove solidified bitumen.

Skin Contact

Cold Product

Wash with soap and water.

Hot Product

Cool immediately with large amounts of cold running water.

Do not remove solidified bitumen from the skin.



Obtain immediate medical treatment.

Inhalation

Move the affected person to fresh air.

Seek medical attention if irritation, dizziness, or breathing difficulty continues.

Ingestion

Not expected during normal industrial use.

Do not induce vomiting.

Seek medical attention immediately.

Section 5: Fire Fighting Measures

Suitable Extinguishing Media

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

Unsuitable Media

- Direct water jet on burning material

Hazardous Combustion Products

- Carbon monoxide (CO)
- Carbon dioxide (CO₂)
- Sulfur oxides
- Smoke
- Hydrocarbon vapors

Firefighters should wear self-contained breathing apparatus (SCBA).

Section 6: Accidental Release Measures

Allow hot material to cool before handling.

Prevent entry into drains, waterways, and soil.

Collect cooled material mechanically for disposal or recycling.

Use absorbent material for small spills.

Exercise caution, as spills create slip hazards.

Section 7: Handling and Storage

Handling

- Avoid overheating.
- Prevent contact with molten bitumen.
- Ensure adequate ventilation.
- Avoid breathing vapors.
- Wear appropriate PPE.

Storage

- Store in tightly closed containers or insulated storage tanks.
- Protect from water contamination.
- Keep away from oxidizing agents.



- Maintain recommended storage temperatures.

Section 8: Exposure Controls / Personal Protection

Engineering Controls

Provide adequate ventilation in heating and application areas.

Personal Protective Equipment

Eye Protection

- Safety goggles
- Face shield

Hand Protection

- Heat-resistant gloves

Body Protection

- Long-sleeved protective clothing
- Heat-resistant boots

Respiratory Protection

Use respiratory protection where 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
Color	Black
Solubility	Insoluble in water
Specific Gravity	1.01–1.06
Flash Point	>230°C
Softening Point	46–54°C
Penetration	50–70 dmm
Auto-Ignition Temperature	>300°C
Vapor Pressure	Very low at ambient temperature

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

Not expected to present acute toxicity under normal handling conditions.

Skin Contact

Hot product causes severe thermal burns.

Eye Contact

Hot material may cause permanent eye damage.

Inhalation

Excessive fumes may cause:

- Headache
- Dizziness
- Respiratory irritation

Chronic Effects

Prolonged exposure to asphalt fumes at elevated temperatures may cause respiratory irritation.

Section 12: Ecological Information

Avoid uncontrolled release into the environment.

Environmental Characteristics

- Insoluble in water
- Low mobility after cooling
- Not readily biodegradable
- May persist in soil if improperly disposed

Prevent contamination of waterways and drainage systems.

Section 13: Disposal Considerations

Dispose of material in accordance with local, regional, and national regulations.

Recycle where facilities exist.

Do not discharge into drains or natural waterways.

Section 14: Transport Information

UN Number: Not regulated (solid product under normal transport conditions)

Proper Shipping Name: Bitumen 50/70

Hazard Class: Not classified

Packing Group: Not applicable

For hot liquid transport, applicable local transport regulations should be followed.

Section 15: Regulatory Information

Comply with applicable local and international regulations regarding the handling, storage, transportation, and disposal of petroleum bitumen.



Section 16: Other Information

The information contained in this MSDS is based on current knowledge and industry practice. It is intended solely as guidance for the safe handling, storage, transportation, and use of Bitumen 50/70. Users are responsible for determining the suitability of the product for their specific applications and for complying with all applicable laws and regulations.