



Material Safety Data Sheet (MSDS)

Bitumen 10/20

According to GHS (Globally Harmonized System)

SECTION 1: Identification

Product Name: Bitumen 10/20

Synonyms:

- Penetration Grade Bitumen 10/20
- Asphalt Cement 10/20
- Petroleum Bitumen

Recommended Use:

- Road construction
- Heavy-duty asphalt pavement
- Airport runways
- Bridge decks
- Industrial flooring
- Asphalt concrete production

Supplier:

BASEKIM Chemical Products LLC

Dubai, United Arab Emirates

Email: info@basekim.com

Website: <https://basekim.com>

Emergency Contact:

Available during business hours

SECTION 2: Hazard Identification

GHS Classification

The product in its solid or ambient-temperature state is **not classified as hazardous**.

Heated bitumen may present hazards including:

- Thermal burns
- Skin irritation
- Eye irritation
- Respiratory irritation from fumes

GHS Label Elements

Signal Word:

Warning

Hazard Statements

- Causes severe burns when hot.
- Heated material releases fumes that may irritate the respiratory tract.
- Contact with molten bitumen may cause permanent skin damage.

Precautionary Statements

- Avoid breathing fumes.



- Wear heat-resistant protective equipment.
- Prevent contact with molten product.
- Use only in well-ventilated areas.

SECTION 3: Composition / Information on Ingredients

Component	CAS Number	Concentration
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Petroleum Bitumen	8052-42-4	>99%
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Contains no hazardous additives under normal conditions.

SECTION 4: First Aid Measures

Eye Contact

Hot product:

Immediately flush with clean water.

Do not attempt to remove adhered bitumen.

Seek immediate medical attention.

Skin Contact

Cold product:

Wash thoroughly with soap and water.

Hot product:

Cool immediately using cold running water for at least 15 minutes.

Do not remove solidified bitumen.

Obtain immediate medical treatment.

Inhalation

Move the affected person to fresh air.

If breathing difficulties persist, seek medical attention.

Ingestion

Not expected during normal industrial use.

Do not induce vomiting.

Seek medical advice.

SECTION 5: Fire Fighting Measures

Suitable Extinguishing Media

- Dry chemical powder
- Foam
- Carbon dioxide
- Sand

Unsuitable Media

- Direct water jet

Specific Hazards

Burning may produce:

- Carbon monoxide
- Carbon dioxide
- Sulfur oxides



- Dense black smoke

Protective Equipment

Use self-contained breathing apparatus (SCBA).

SECTION 6: Accidental Release Measures

Solid Product

Collect mechanically.

Recycle where possible.

Hot Product

Allow material to cool before removal.

Prevent entry into drains or waterways.

Wear suitable PPE.

SECTION 7: Handling and Storage

Handling

- Avoid overheating.
- Maintain recommended handling temperatures.
- Avoid inhalation of fumes.
- Prevent water contamination.
- Use proper lifting equipment.

Storage

- Store in dry, covered areas.
- Protect from moisture.
- Keep containers tightly closed.
- Store away from oxidizing agents.

Recommended Storage Temperature

Ambient temperature.

Heating only before application.

SECTION 8: Exposure Controls / Personal Protection

Engineering Controls

- Local exhaust ventilation
- Good workplace ventilation

Eye Protection

Safety goggles or face shield.

Hand Protection

Heat-resistant gloves.

Skin Protection

Long sleeves.

Protective clothing.

Safety boots.

Respiratory Protection

Normally not required.



Use organic vapor respirator when exposed to fumes.

SECTION 9: Physical and Chemical Properties

Property	Value
Appearance	Black solid
Odor	Petroleum odor when heated
Physical State	Solid
Penetration	10–20 dmm
Softening Point	58–66°C
Flash Point	>250°C
Density	Approximately 1.02–1.06 g/cm ³
Solubility in Water	Insoluble
Auto-Ignition Temperature	>300°C

SECTION 10: Stability and Reactivity

Chemical Stability

Stable under normal storage conditions.

Conditions to Avoid

- Excessive heating
- Open flames
- Strong oxidizers

Hazardous Decomposition

May produce:

- Carbon monoxide
- Carbon dioxide
- Sulfur oxides

Hazardous Polymerization

Will not occur.

SECTION 11: Toxicological Information

Likely Routes of Exposure

- Skin contact
- Eye contact
- Inhalation of fumes

Health Effects

Skin:

Molten bitumen causes severe burns.

Eyes:

Hot product may cause permanent eye injury.

Respiratory:

Fumes may irritate nose, throat, and lungs.



Chronic Effects

Repeated exposure to excessive fumes may cause respiratory discomfort.

SECTION 12: Ecological Information

Ecotoxicity

Low toxicity to aquatic organisms.

Persistence

Not readily biodegradable.

Mobility

Insoluble in water.

Environmental Precautions

Prevent release into soil and waterways.

SECTION 13: Disposal Considerations

Dispose according to local regulations.

Recycle unused product whenever practical.

Do not discharge into drains or water systems.

SECTION 14: Transport Information

UN Number

Not regulated for transport under ADR, IMDG, IATA, or RID when transported below its flash point.

Proper Shipping Name

Bitumen

Hazard Class

Not classified as dangerous goods under normal transportation conditions.

Packing Group

Not applicable.

SECTION 15: Regulatory Information

Manufactured according to internationally recognized petroleum industry standards.

Applicable References

- GHS (Globally Harmonized System)
- OSHA Hazard Communication Standard
- REACH (EU)
- CLP Regulation

SECTION 16: Other Information

The information contained in this Material Safety Data Sheet is based on current knowledge and experience. It is intended solely as guidance for the safe handling, storage, transportation, use, and disposal of Bitumen 10/20. It does not constitute a guarantee of specific product properties or suitability for a particular application.



Product Specification Summary

Property

Penetration @25°C

Softening Point

Flash Point

Solubility

Ductility @25°C

Specific Gravity

Typical Value

10–20 dmm

58–66°C

Min 250°C

Min 99%

Min 100 cm

1.01–1.06

This MSDS follows the standard 16-section format aligned with GHS and is suitable for export documentation and customer technical documentation.

