



Material Safety Data Sheet (MSDS)

Chinese Standard Bitumen AH 50

Product Name: Chinese Standard Bitumen AH 50

Product Type: Penetration Grade Bitumen

Grade: AH 50

Intended Use: Road construction, asphalt production, paving applications, industrial use

1. Identification of the Product and Supplier

Item	Information
Product Name	Chinese Standard Bitumen AH 50
Chemical Name	Bitumen / Asphalt Cement
Product Category	Petroleum-derived asphalt binder
Grade	AH 50 Penetration Grade Bitumen
Recommended Use	Asphalt pavement, road construction, industrial paving
Restrictions on Use	Not intended for food, pharmaceutical, or household applications
Supplier	Basekim

2. Hazard Identification

Classification

Chinese Standard Bitumen AH 50 is a solid petroleum product at ambient temperature. The main hazards occur when the product is heated to application temperatures.

Potential Hazards:

- Hot bitumen can cause severe thermal burns.
- Heated vapors may irritate the respiratory system.
- Contact with molten material can damage skin and eyes.
- Combustible material when exposed to excessive heat or open flame.



Signal Word:

Danger

Hazard Statements:

- H315: Causes skin irritation when contact occurs with hot material.
- H319: Causes serious eye irritation.
- H335: May cause respiratory irritation from heated fumes.
- H227: Combustible liquid when heated.

3. Composition and Information on Ingredients

Component	CAS Number	Typical Content
Petroleum Bitumen	8052-42-4	100%
Hydrocarbon Compounds	—	Trace components

Chinese Standard Bitumen AH 50 does not contain intentionally added hazardous substances under normal industrial specifications.

4. First Aid Measures

Skin Contact

- Immediately cool affected area with clean, cold water.
- Do not attempt to remove solidified bitumen from the skin forcefully.
- Seek medical attention for burns caused by hot material.
- Remove contaminated clothing carefully.

Eye Contact

- Flush eyes with clean water for at least 15 minutes.
- Do not rub eyes.
- Obtain medical advice if irritation continues.



Inhalation

- Move the affected person to fresh air.
- Keep the person comfortable and monitor breathing.
- Seek medical attention if respiratory symptoms continue.

Ingestion

- Bitumen is not expected to be ingested during normal industrial use.
- Do not induce vomiting.
- Seek medical advice if ingestion occurs.

5. Fire Fighting Measures

Suitable Extinguishing Media:

Use:

- Dry chemical powder
- Carbon dioxide (CO₂)
- Foam
- Water fog

Unsuitable Extinguishing Media:

Avoid using direct water streams on molten bitumen because it may cause dangerous splashing.

Fire Hazards:

When heated, bitumen may release:

- Carbon monoxide
- Carbon dioxide
- Hydrocarbon vapors
- Smoke and irritating fumes

Protective Equipment for Firefighters:

Firefighters should use:



- Self-contained breathing apparatus
- Protective clothing
- Heat-resistant equipment

6. Accidental Release Measures

Personal Precautions:

- Avoid direct contact with hot material.
- Wear appropriate protective equipment.
- Keep unauthorized personnel away from the spill area.

Environmental Precautions:

- Prevent large quantities from entering waterways.
- Avoid contamination of soil and drainage systems.

Cleanup Methods:

Hot Bitumen:

- Allow the material to cool and solidify.
- Remove mechanically using suitable equipment.

Solid Bitumen:

- Collect and place into appropriate containers for reuse or disposal.

7. Handling and Storage

Safe Handling:

- Handle only by trained personnel.
- Avoid skin contact with molten bitumen.
- Use proper protective equipment during heating and transfer.
- Maintain controlled heating conditions.

Storage Conditions:

- Store in dry and clean areas.
- Keep away from open flames and ignition sources.
- Prevent contamination with water or foreign materials.



- Use suitable heated storage tanks for prolonged storage.

Recommended Storage Temperature:

Follow supplier recommendations and maintain controlled temperatures to prevent overheating.

8. Exposure Controls and Personal Protection

Engineering Controls:

- Provide adequate ventilation in working areas.
- Use local exhaust systems where heating occurs.
- Control exposure to bitumen fumes.

Personal Protective Equipment (PPE):

Eye Protection:

- Safety goggles or face shield.

Hand Protection:

- Heat-resistant gloves suitable for hot materials.

Skin Protection:

- Protective clothing with long sleeves.
- Safety footwear.

Respiratory Protection:

Use appropriate respiratory protection when working in areas with insufficient ventilation or high vapor concentration.



9. Physical and Chemical Properties

Property	Information
Appearance	Black solid or semi-solid material
Odor	Petroleum odor
Chemical Nature	Hydrocarbon mixture
Solubility in Water	Insoluble
Density at 25°C	Approximately 1.01–1.06 g/cm ³
Flash Point	Minimum 260°C
Softening Point	Minimum 49°C
Penetration at 25°C	40–60 dmm
Application Temperature	Approximately 150–180°C

10. Stability and Reactivity

Stability:

Chinese Standard Bitumen AH 50 is stable under normal storage and handling conditions.

Conditions to Avoid:

Avoid:

- Excessive heating
- Open flames
- Water contamination during heating

Incompatible Materials:

Avoid contact with:

- Strong oxidizing agents
- Strong acids
- Strong chemical oxidizers



Hazardous Decomposition Products:

Thermal decomposition may produce:

- Carbon monoxide
- Carbon dioxide
- Hydrocarbon fumes

11. Toxicological Information

Acute Effects:

Skin Contact:

Hot bitumen may cause severe burns.

Eye Contact:

Hot material and fumes may cause irritation.

Inhalation:

Long exposure to heated bitumen fumes may cause:

- Throat irritation
- Respiratory discomfort
- Headache

Chronic Effects:

Normal industrial handling of properly controlled bitumen exposure presents low risk. Workers should follow workplace safety procedures and exposure controls.

12. Ecological Information

Chinese Standard Bitumen AH 50 is not soluble in water and has low mobility in the environment.

However:



- Avoid uncontrolled release.
- Prevent contamination of water sources.
- Dispose of waste according to local environmental regulations.

13. Disposal Considerations

Dispose of unused material and contaminated packaging according to local regulations.

Recommended disposal methods:

- Recycling where possible
- Controlled industrial disposal
- Approved waste management facilities

Do not discharge molten bitumen into drains or waterways.

14. Transport Information

Transport Information	Details
UN Number	Not classified as dangerous goods under normal transport conditions
Shipping Name	Bitumen / Asphalt
Transport Form	Solid blocks, drums, jumbo bags, or bulk shipment
Packaging	Steel drums, jumbo bags, tanker
Transport Requirement	Protect from contamination and excessive heat

15. Regulatory Information

Chinese Standard Bitumen AH 50 should be handled according to:

- Workplace safety regulations
- Chemical handling requirements
- Transportation regulations
- Environmental protection standards



Users must comply with applicable national and regional regulations.

16. Additional Information

This MSDS provides general safety information for Chinese Standard Bitumen AH 50. The information is based on current technical knowledge and is intended to assist users in safe handling, storage, and transportation.

Before industrial use, customers should review project requirements and follow all applicable safety procedures.

Product: Chinese Standard Bitumen AH 50

Grade: Penetration Grade Bitumen AH 50

Application: Road Construction and Asphalt Manufacturing

Supplier: Basekim