



Technical Data Sheet (TDS)

Chinese Standard Bitumen AH 50

1. Product Description

Chinese Standard Bitumen AH 50 is a high-quality penetration grade asphalt binder designed for road construction, asphalt pavement production, and infrastructure applications. It provides excellent adhesion, durability, and resistance against heavy traffic loads.

AH 50 Bitumen is manufactured according to Chinese standard requirements and offers consistent physical properties for professional asphalt applications. Due to its balanced hardness and temperature performance, it is widely used by road contractors, asphalt manufacturers, and infrastructure developers worldwide.

2. Product Information

Property	Description
Product Name	Chinese Standard Bitumen AH 50
Product Type	Penetration Grade Bitumen
Grade	AH 50
Classification	Road Grade Asphalt Binder
Appearance	Black, homogeneous solid/semi-solid material
Application	Road construction, asphalt mixtures, paving projects
Manufacturing Standard	Chinese Standard Specifications

3. Technical Specifications

Test Property	Test Method	Specification
Penetration at 25°C (0.1 mm)	ASTM D5 / T0604	40 – 60
Softening Point (Ring & Ball)	ASTM D36 / T0606	Minimum 49°C
Ductility at 15°C	ASTM D113 / T0605	Minimum 100 cm
Solubility in Trichloroethylene	ASTM D2042 / T0607	Minimum 99%
Flash Point (Cleveland Open Cup)	ASTM D92	Minimum 260°C
Specific Gravity at 25°C	ASTM D70	1.01 – 1.06
Wax Content	T0615	According to standard requirements



Test Property	Test Method	Specification
Loss on Heating	ASTM D6 / T0609	Maximum 0.6%
Heating Temperature Range	—	150 – 180°C

4. Physical Characteristics

Penetration

AH 50 Bitumen has a penetration range of 40–60 dmm at 25°C, providing suitable hardness for high-performance asphalt applications.

Softening Point

The softening point indicates the temperature where bitumen begins to soften. AH 50 provides good resistance against high-temperature deformation.

Ductility

The excellent ductility value allows the binder to stretch without cracking, improving pavement flexibility and durability.

Adhesion Performance

Chinese Standard Bitumen AH 50 provides strong bonding with mineral aggregates, helping asphalt mixtures maintain structural stability.

5. Main Applications

Chinese Standard Bitumen AH 50 is suitable for:

- Highway construction
- Asphalt pavement production
- Airport runway construction
- Road maintenance projects
- Heavy-duty road surfaces
- Industrial paving applications
- Asphalt concrete manufacturing



6. Recommended Handling Conditions

Parameter	Recommendation
Storage Temperature	Keep in suitable heated storage tanks
Application Temperature	Approximately 150–180°C
Mixing Temperature	According to asphalt mix design
Heating Method	Controlled indirect heating recommended
Storage Condition	Dry and protected from contamination

7. Packaging Options

Chinese Standard Bitumen AH 50 can be supplied in different packaging formats depending on buyer requirements:

Packaging Type	Application
180 kg / 200 kg Steel Drums	Export shipments and smaller projects
Jumbo Bags	Cost-effective bulk transportation
Bulk Tanker Shipment	Large infrastructure projects

All packaging should protect the product from contamination and maintain quality during transportation.

8. Quality Control Tests

Each batch of AH 50 Bitumen can be tested through laboratory quality control procedures, including:

- Penetration test
- Softening point test
- Ductility test
- Solubility test
- Flash point test
- Specific gravity test
- Heating loss test

Quality verification documents are available according to customer requirements.



9. Available Export Documents

For international shipments, the following documents can be provided:

- Certificate of Analysis (COA)
- Technical Data Sheet (TDS)
- Material Safety Data Sheet (MSDS)
- Commercial Invoice
- Packing List
- Certificate of Origin
- Shipping Documents

10. Storage and Safety Information

Store AH 50 Bitumen in suitable containers away from contamination and excessive moisture. Avoid direct contact with hot bitumen because the material requires high application temperatures.

Operators should use appropriate personal protective equipment, including:

- Heat-resistant gloves
- Protective clothing
- Safety glasses
- Suitable footwear

Always follow the safety instructions provided in the Material Safety Data Sheet (MSDS).

11. Shelf Life

When stored correctly under recommended conditions, Chinese Standard Bitumen AH 50 maintains its quality for extended periods. Proper temperature control and contamination prevention help preserve product performance.



12. Disclaimer

The values listed in this Technical Data Sheet represent typical specifications for Chinese Standard Bitumen AH 50. Actual values may vary depending on production batch, manufacturing standards, and customer requirements.

Buyers should confirm final specifications before ordering.

Product: Chinese Standard Bitumen AH 50

Application: Road Construction & Asphalt Manufacturing

Grade: AH 50 Penetration Grade Bitumen