

Technical Data Sheet (TDS) Penetration Grade Bitumen 60/70.

Product Description

Penetration Grade Bitumen 60/70 is a paving grade asphalt binder widely used in road construction and pavement production. The material is a thermoplastic hydrocarbon product that behaves as a viscoelastic material. At ambient temperatures it is semi-solid and becomes fluid when heated, allowing effective mixing with aggregates to produce asphalt concrete.

Composition

Bitumen consists mainly of hydrocarbon chains classified as:

- Maltenes
- Asphaltenes

These components give the material its thermoplastic and viscoelastic behavior.

Technical Specifications

TESTS	UNITS	METHOD	SPECIFICATION BITUMEN 60/70 Pen.	
			MIN	MAX
Specific Gravity at 25 °C	(g)/(g)	ASTM D70	Report	
Penetration at 25°C, 100g, 5s	0.1 mm	ASTM D5	60	70
Softening Point (Ring and Ball)	°C	ASTM D36	46	
Flash Point (Cleveland Open Cup)	°C	ASTM D92	225	-
Ductility at 25°C, 5cm/min	cm	ASTM D113	100	-
Solubility in N-Propyl Bromide / Trichloroethylene	%	ASTM D7553 / D2042	99.0	-
Retained Penetration after TFOT	%	ASTM D5	52+	
Ductility at 25°C, 5cm/min, after *TFOT	cm	ASTM D113	50	

* ASTM - American Society for Testing Materials

Physical and Chemical Properties

Appearance: Brown to black semi-solid material

Softening Point: 46 – 56 °C

Specific Gravity: 1.01 – 1.07

Reactivity: Stable at normal temperatures

Packaging

Packaged in 240kg waxed fiber-board.

Product processing plant reference photos



Storage and Handling

Store in dry, ventilated areas away from direct sunlight and ignition sources. When handling heated bitumen, appropriate protective equipment (PPE) should be used.

Storage and Handling

This product complies with the requirements of ASTM D946 for Penetration Grade Bitumen used in pavement construction.

Safety Information

Exposure to hot bitumen fumes may cause irritation of the skin, eyes and respiratory tract. Burns may occur when handling hot material. Adequate ventilation and protective equipment should always be used.

First Aid Measures

Eye Contact: Flush immediately with large amounts of water and seek medical attention.
Skin Contact: Cool immediately with water. Do not attempt to remove hardened material.
Inhalation: Move exposed person to fresh air and obtain medical assistance.

Fire Protection

Flash Point: ≥ 225 °C
Extinguishing Media: Foam, dry chemical or carbon dioxide (CO₂).
Firefighters should wear self-contained breathing apparatus (SCBA).

Spill and Disposal

Remove ignition sources and provide ventilation. Small spills can be absorbed with sand or inert materials and disposed of according to local regulations.

Disclaimer

The information provided in this document is based on available technical data and is believed to be accurate. It is provided for guidance purposes only and does not constitute a contractual guarantee.