



Bitumen 10/20 Technical Specification

Product Description

Bitumen 10/20 is a hard penetration-grade paving bitumen manufactured through the vacuum distillation of crude oil. It is designed for heavy-duty road construction, airport pavements, industrial flooring, and asphalt mixtures requiring high stiffness and excellent resistance to permanent deformation.

Bitumen 10/20 complies with internationally recognized paving bitumen specifications and provides superior performance under high traffic loads and elevated temperatures.

Technical Specifications

Property	Test Method	Unit	Specification
Penetration at 25°C	ASTM D5	0.1 mm	10 – 20
Softening Point	ASTM D36	°C	58 – 66
Ductility at 25°C	ASTM D113	cm	Min 100
Flash Point (COC)	ASTM D92	°C	Min 250
Solubility in Trichloroethylene	ASTM D2042	wt.%	Min 99.0
Specific Gravity at 25°C	ASTM D70	g/cm ³	1.01 – 1.06
Loss on Heating	ASTM D6	wt.%	Max 0.20
Penetration After Thin Film Oven Test (TFOT)	ASTM D5	% of Original	Min 55
Increase in Softening Point (TFOT)	ASTM D36	°C	Max 8
Spot Test	AASHTO T102 -		Negative
Water Content	ASTM D95	wt.%	Max 0.20

Typical Characteristics

- Excellent resistance to rutting
- High stiffness for heavy traffic conditions
- Outstanding performance in hot climates
- Strong adhesion to mineral aggregates
- High durability and oxidation resistance
- Excellent workability at recommended application temperatures
- Long service life

Recommended Applications

- Highway construction
- Airport runways and taxiways
- Heavy-duty asphalt pavements
- Industrial roads
- Container terminals
- Port pavements



- Bridge decks
- Asphalt concrete production
- Polymer Modified Bitumen (PMB) manufacturing
- High-load intersections

Packing

Available in:

- New Steel Drum (180 kg)
- Jumbo Bag
- Poly Bag
- Bitutainer
- Bulk

Storage

- Store in dry, covered, and well-ventilated areas.
- Protect from moisture and direct sunlight.
- Heat gradually using indirect heating systems.
- Avoid overheating above the recommended handling temperature.
- Keep containers tightly sealed when not in use.

Recommended Handling Temperature

Operation	Temperature
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Storage	Ambient
Pumping	150–170°C
Mixing	160–175°C
Compaction	140–160°C

Compliance

Bitumen 10/20 is manufactured in accordance with internationally recognized standards, including:

- ASTM International
- AASHTO
- EN 12591 (comparable penetration grade requirements where applicable)

Product Identification

Item	Description
Product Name	Bitumen 10/20
Product Type	Penetration Grade Bitumen
CAS No.	8052-42-4
HS Code	27132000