

TECHNICAL DATA SHEET

PENETRATION GRADE BITUMEN 40/50



IQTB-800-QL-TDS-0001

DESCRIPTION

Bitumen 40/50 is a standard Penetration Grade Bitumen, classified under ASTM D946M, and is widely recognized for its reliability in paving applications. It is primarily used in road construction and the production of high-performance asphalt pavements, especially in projects requiring enhanced durability such as highways, airports, and heavy-duty surfaces.

This grade of Bitumen is most utilized in the manufacture of hot mix asphalt for both base courses and wearing courses, where strength and long-term performance are critical.

Penetration Grade Bitumen is produced from Vacuum Residue (VR), which undergoes air blowing in an Oxidation Blowing Unit. This fully automated, continuous process ensures consistent and homogeneous product quality, meeting stringent specifications and international standards.



SPECIFICATIONS

Test	Specification	Unit	Test Method
Penetration @ 25°C	40-50	mm/10	ASTM D5
Softening Point (R & B)	49 Min	°C	ASTM D36
Ductility @ 25°C	100 Min	cm	ASTM D113
Solubility in TCE	99 Max	%	ASTM D2042
Flash point °C	230 Min	°C	ASTM D92
Specific gravity @ 25°C	1.01-1.06	kg/cm³	ASTM D70
Spot Test	Negative	-	AASHTO T102
After Thin-Film Oven Test (ASTM D1754)			
Loss on heating	0.8 Max	wt %	ASTM D6
Retained Penetration	55 Min	%	ASTM D5
Ductility of residue	50 Min	cm	ASTM D113

RECOMMENDED WORKING TEMPERATURES

-  Storing temperature (°C): < 160
-  Mixing temperature (°C): 135-155.
-  Compacting Temperature (°C): 125-145

GUARANTY AND SAFETY

We as Iraq Altaqa company guaranty the quality of Bitumen Penetration Grade 40/50 with the arrangement of the international inspector to check quality and quantity of the Bitumen Penetration grade 40/50 during the loading to the vessel and controlling the production by QC by batch test report before shipping.

APPLICATIONS

Bitumen 40/50 is a durable paving grade Bitumen suitable for high-stress applications. It is commonly used in high-traffic highways, urban roads, and hot mix asphalt production, offering excellent stability and resistance to deformation. This grade is also ideal for rehabilitation projects, airport runways, and heavy-duty surfaces such as industrial yards and ports, where long-term performance is critical.

PACKAGING

Our bitumen is available in a range of packaging options, including:



All packaging is weatherproof and engineered for safe, efficient handling and transportation in diverse operating environments.



Complies with
ASTM D946M