

BITUMEN PRODUCT CATALOG

Petroleum Bitumen Exported from the United Arab Emirates

Penetration Grades | AH Grades | Viscosity (VG) Grades



All specifications tested to ASTM / EN / IP / AASHTO standards

About This Catalog

We are a reputable supplier and exporter of various types of petroleum bitumen from the United Arab Emirates. By leveraging direct access to prominent refineries, stringent quality control, and a professional commercial team, products are supplied in compliance with international standards to global markets.

With a focus on consistent quality, diverse packaging options (bulk, drums, jumbo bags, flexi tanks), and timely delivery, this supply chain has become a reliable partner for civil, road construction, and industrial projects across a wide range of countries.

Packaging Options

- Bulk (tanker / vessel)
- Steel drums (150–180 kg)
- Jumbo bags (1 ton)
- Flexi tanks (ISO container, ~20 tons)

Product Range

- Penetration Grade Bitumen — 60/70, 85/100, 50/70, 200/300, 70/100, 30/40, 40/50
- AH Grade Bitumen — AH70, AH90
- Viscosity Grade (VG) Bitumen — VG10, VG20, VG30, VG40

Penetration grade bitumens are classified based on the depth of needle penetration at 25°C and are among the most common types of bitumen used in road construction projects worldwide. A complete range of penetration grade bitumens is supplied in accordance with ASTM / EN standards.

Bitumen 60/70

Penetration Grade · General Purpose

Test	Method	Unit	Result
Penetration @ 25°C	ASTM D5 / ISIRI 2950	0.1 mm	65
Softening Point	ASTM D36 / INSO 3868	°C	49.3
Flash Point	ASTM D92 / INSO 198	°C	322
Ductility @ 25°C	ASTM D113 / INSO 3866	cm	>100
Specific Gravity @ 25°C	ASTM D70 / INSO 2253	—	1.0293
Solubility in TCE	ASTM D2042 / INSO 2253	%	99.8
Absolute Viscosity @ 60°C	ASTM D2171	Poises	1782
Loss on Heating	ASTM D6	wt%	0.006
Drop in Penetration @ 25°C	ASTM D5 & D6	%	6.15
Spot Test	AASHTO T102	—	Negative
Change in Mass (TFOT)*	ASTM D1754 / ISIRI 2957	%	0.041
Retained Penetration @ 25°C (TFOT)*	ASTM D1754 / D5	wt%	70.77
Ductility @ 25°C (TFOT)*	ASTM D1754 / D113	cm	>50

*TFOT: Thin Film Oven Test, 163°C, 3.2 mm, 5 hours.

One of the most widely used penetration grades, offering a suitable balance between hardness and flexibility.

Applications

- Asphalt for main roads and highways
- Road construction projects with medium to heavy traffic

Common Consumer Countries

- India
- UAE
- Iran
- Oman
- African countries

Bitumen 85/100

Penetration Grade · Softer, Cold-Climate

Test	Method	Unit	Range	Result
Penetration @ 25°C	ASTM D5 / ISIRI 2950	0.1 mm	85–100	91
Softening Point	ASTM D36 / INSO 3868	°C	Min 42	47.2
Flash Point	ASTM D92 / INSO 198	°C	Min 230	301
Ductility @ 25°C	ASTM D113 / INSO 3866	cm	Min 100	>100
Specific Gravity @ 25°C	ASTM D70 / INSO 2253	—	1.01–1.06	1.01
Solubility in TCE	ASTM D2042 / INSO 2253	%	Min 99	99.99
Penetration Index	—	—	0.7 to 1.5	-0.86
Loss on Heating	ASTM D6	wt%	Max 0.5	0.02
Drop in Penetration @ 25°C	ASTM D5 & D6	%	Max 20	13.4
Spot Test	AASHTO T102	—	Negative	Negative
Change in Mass (TFOT)*	ASTM D1754 / ISIRI 2957	wt%	Max 1	0.6
Retained Penetration @ 25°C (TFOT)*	ASTM D1754 / D5	%	Min 47	49.60
Ductility @ 25°C (TFOT)*	ASTM D1754 / D113	cm	Min 77	95

*TFOT: Thin Film Oven Test, 163°C, 3.2 mm, 5 hours.

A softer bitumen compared to 60/70, suitable for regions with lower temperatures.

Applications

- Urban and secondary roads
- Regions with temperate to cold climates

Common Consumer Countries

- China
- Vietnam
- Philippines
- Bangladesh

Bitumen 50/70

Penetration Grade · Harder, Heavy-Traffic

Test	Method	Unit	Result
Penetration @ 25°C	ASTM D5 / ISIRI 2950	0.1 mm	66
Softening Point	ASTM D36 / INSO 3868	°C	50
Viscosity @ 60°C	ASTM D4402	Pa·s	261
Viscosity @ 135°C	ASTM D4402	mPa·s	469
Flash Point	ASTM D92 / INSO 198	°C	340
Spot Test	AASHTO T102	% Xylene	25
Change in Mass (TFOT)*	ASTM D1754 / ISIRI 2957	%	0.09
Viscosity @ 60°C (TFOT)*	ASTM D4402	% Original	236
Softening Point (TFOT)*	ASTM D36	°C	55
Increase in Softening Point	—	°C	5
Retained Penetration @ 25°C (TFOT)*	ASTM D1754 / D5	wt%	65

*TFOT: Thin Film Oven Test, 163°C, 3.2 mm, 5 hours.

Harder than 60/70, suitable for hot and high-traffic regions.

Applications

- Highways
- Roads with high axle loads

Common Consumer Countries

- Saudi Arabia
- UAE
- Qatar
- Kuwait

Bitumen 200/300

Penetration Grade · Very Soft, Cold-Region

Test	Method	Unit	Result
Penetration @ 25°C	ASTM D5 / ISIRI 2950	0.1 mm	291
Softening Point	ASTM D36 / INSO 3868	°C	37.6
Flash Point	ASTM D92 / INSO 198	°C	243
Ductility @ 25°C	ASTM D113 / INSO 3866	cm	167
Specific Gravity @ 25°C	ASTM D70 / INSO 2253	—	1.016
Solubility in TCE	ASTM D2042 / INSO 2253	%	99.99
Loss on Heating	ASTM D6	wt%	0.059
Drop in Penetration @ 25°C	ASTM D5	%	7.21
Spot Test	AASHTO T102	—	Negative

A very soft penetration-grade bitumen, often used for lower surface courses, cold climates, and as a feedstock for further processing. It is one of the softest standard grades, offering high flexibility and adhesion in very low temperatures.

Key Characteristics

- High Penetration: very soft consistency
- Low Softening Point: susceptible to deformation in hot weather
- Excellent Adhesion & Flexibility: ideal for bonding and applications where thermal cracking is a risk

Applications

- Road construction in very cold climates and polar regions
- Prime coats and tack coats (binder layer between pavement lifts)
- Manufacturing of modified bitumens and cutback bitumens
- Industrial uses such as roofing, damp-proofing, and pipe coatings
- Spraying applications where a thin, penetrating binder is needed

Common Consumer Countries

- Russia (especially Siberia and far eastern regions)
- Canada (northern regions)
- Northern Europe (Norway, Sweden, Finland)
- Mongolia
- Kazakhstan
- Northern China (seasonal / regional use)
- Countries with significant cold-area road maintenance programs

Bitumen 70/100

Penetration Grade · Higher Flexibility

Test	Method	Unit	Result
Penetration @ 25°C	IP 49	mm/10	70/100
Softening Point	IP 58	°C	43/51
Change of Mass	—	%	0.8
Retained Penetration	IP 49	%	56 min
Softening Point After Hardening	IP 58	°C	45
Flash Point	IP 36	°C	230 min
Solubility	IP 47	wt%	99 min
Kinematic Viscosity @ 135°C	IP 370	mm ² /s	230 min

A grade with higher flexibility, offering good performance at lower temperatures.

Applications

- Asphalt for urban roads
- Light asphalt pavements

Common Consumer Countries

- Sri Lanka
- Indonesia
- Malaysia
- Some African countries

Bitumen 30/40

Penetration Grade · Hard, High-Temperature

Test	Method	Result
Specific Gravity @ 25°C	ASTM D3289	1.00–1.25
Penetration @ 25°C, 10 mm	ASTM D5	30–40
Softening Point, °C	ASTM D36	55–63
Ductility @ 25°C, cm	ASTM D113	Min 100
Loss on Heating, wt%	ASTM D6	0.03
Drop in Penetration After Heating, %	ASTM D5/D6	Max 20
Spot Test	AASHTO T102	Negative
Flash Point, °C	ASTM D92	Min 250
Solubility in CS ₂ , wt%	ASTM D4	5.99

A hard bitumen with high resistance to deformation at high temperatures.

Applications

- Airport runways
- Roads with heavy traffic and high temperatures

Common Consumer Countries

- South Africa
- Nigeria
- Gulf region countries

Bitumen 40/50

Penetration Grade · Hard, Tropical-Ready

Test	Method	Result
Specific Gravity @ 25°C	ASTM D3289	1.00–1.25
Penetration @ 25°C, 10 mm	ASTM D5	40–50
Softening Point, °C	ASTM D36	52–60
Ductility @ 25°C, cm	ASTM D113	Min 100
Loss on Heating, wt%	ASTM D6	0.03
Drop in Penetration After Heating, %	ASTM D5/D6	Max 20
Spot Test	AASHTO T102	Negative
Flash Point, °C	ASTM D92	Min 250
Solubility in CS ₂ , wt%	ASTM D4	5.99

High hardness but more flexible than 30/40.

Applications

- Industrial roads
- Tropical regions

Common Consumer Countries

- Pakistan
- India (for specific projects)
- Africa

Bitumen AH70

AH Grade · Medium Penetration

Test	Result
Penetration @ 25°C, 100g (0.1 mm)	60–80
Penetration Index (PI)	-1.5 to +1.0
Softening Point (°C)	> 45
Ductility @ 10°C (cm)	> 50
Ductility @ 15°C (cm)	> 100
Dynamic Viscosity @ 60°C (Pa·s)	160–180
Wax Content (%)	< 2.2
Flash Point (°C)	> 260
Solubility (%)	> 99.5
Change in Mass, TFOT* (%)	< 0.8
Retained Penetration @ 25°C, TFOT* (%)	> 61
Residual Ductility After Heating @ 10°C (cm)	> 6
Residual Ductility After Heating @ 15°C (cm)	> 100

*TFOT: Thin Film Oven Test, 163°C, 3.2 mm, 5 hours.

Penetration grade AH70 bitumen is one of the most widely used bitumen grades in road construction projects. Due to its optimal balance between hardness and flexibility, it performs exceptionally well in temperate to hot climate conditions.

Characteristics

- Medium penetration
- Suitable resistance to deformation
- High adhesion to stone aggregates

Applications

- Asphalt for main roads and highways
- Urban infrastructure projects
- Production of hot mix asphalt (HMA)

Common Consuming Countries

- China
- India

- United Arab Emirates
- Oman
- Kenya
- Tanzania

Bitumen AH90

AH Grade · Higher Penetration, Softer

Test	Result
Penetration @ 25°C, 100g (0.1 mm)	80–100
Penetration Index (PI)	-1.5 to +1.0
Softening Point (°C)	> 44
Ductility @ 10°C (cm)	> 50
Ductility @ 15°C (cm)	> 100
Dynamic Viscosity @ 60°C (Pa·s)	140–160
Wax Content (%)	< 2.2
Flash Point (°C)	> 245
Solubility (%)	> 99.5
Change in Mass, TFOT* (%)	< 0.8
Retained Penetration @ 25°C, TFOT* (%)	> 57
Residual Ductility After Heating @ 10°C (cm)	> 8
Residual Ductility After Heating @ 15°C (cm)	> 100

*TFOT: Thin Film Oven Test, 163°C, 3.2 mm, 5 hours.

AH90 bitumen has higher penetration and is softer compared to AH70. This grade is considered an ideal choice for regions with lower temperatures or for projects that require greater flexibility.

Characteristics

- High flexibility
- Suitable performance in areas with thermal stress
- Reduction of asphalt cracking

Applications

- Asphalt for secondary and urban roads
- Road construction projects in colder regions
- Asphalt overlays with moderate traffic

Common Consuming Countries

- Vietnam
- Indonesia
- Philippines

- Sri Lanka
- Bangladesh
- Some African countries

Viscosity Grade Bitumen (VG)

VG bitumen is classified based on its viscosity and is one of the most widely used types of bitumen in modern road construction projects, especially in countries with high temperatures.

Common Available Grades

- VG 10
- VG 20
- VG 30
- VG 40

VG 30

Viscosity Grade

Test	Method	Result
Absolute Viscosity @ 60°C	ASTM D2171	2900 Poises
Kinematic Viscosity @ 135°C	ASTM D2170	360 cSt
Density @ 25°C	ASTM D70	1018 kg/m ³
Penetration @ 25°C	ASTM D5	64 (0.1 mm)
Softening Point	ASTM D36	50.1 °C
Flash Point	ASTM D92	300 °C
Solubility in TCE	ASTM D2042	99.8 wt%
Ductility @ 25°C	ASTM D113	120 cm
Spot Test	AASHTO T102	Negative

VG 40

Viscosity Grade · Higher Viscosity

Test	Method	Result
Absolute Viscosity @ 60°C	ASTM D2171	4380 Poises
Kinematic Viscosity @ 135°C	ASTM D2170	474 cSt
Penetration @ 25°C	ASTM D5	50 (0.1 mm)
Softening Point	ASTM D36	53.2 °C
Flash Point	ASTM D92	302 °C
Solubility in TCE	ASTM D2042	99.8 wt%
Specific Gravity @ 25/25°C	ASTM D70	1.016
Spot Test	AASHTO T102	Negative
Viscosity Ratio @ 60°C (residue)*	ASTM D2171	2.18
Ductility @ 25°C, 5 cm/min (residue)*	ASTM D113	80 cm

*Tested on residue from Thin Film Oven Test, ASTM D1754.

VG Series — Features & Applications

Features

- High thermal stability
- Better quality control compared to penetration grade bitumen
- Suitable performance in warm weather conditions

Applications

- Asphalt for high-traffic roads
- National road construction projects
- Replaces 60/70 and 80/100 penetration grade bitumen in many countries

Common Consuming Countries

- India
- Nepal
- Bhutan
- Bangladesh
- Persian Gulf countries