

1) BITUMEN Product Description:

Bitumen is a substance produced through the distillation of crude oil that is known for its waterproofing and adhesive properties. **Bitumen** production through distillation removes lighter crude oil components, such as gasoline and diesel, leaving the “heavier” **bitumen or Asphalt** behind. It is widely used as a binder of mineral aggregates in road pavements, as well as waterproofing material, as a joint sealant, and for roofing applications.

We supply the following grades of Bitumen:

Bitumen 30/40: is suitable for road construction and repair for the asphalt pavements with superior properties. This type of bitumen used in the manufacture of hot mix asphalt for bases and wearing courses.

Specification Bitumen Grade 30/40

Property	Specifications	Test Method
Penetration @ 25 °C	30/40	D – 5
Softening point °C	55/63	D–36
Ductility @25 °C	100 Min	D–113
Loss on heating(wt) %	0.2 Max	D – 6
Flash point °C	250 Min	D–92
Solubility in CS ₂ (wt) %	99.05 Min	D – 4
Drop in penetration after heating %	20 Max	D – 5
Density @25 °C	1.01/1.06	D–70/D–3289
Spot test	Negative	A.A.S.H.O.T102

Bitumen 40/50: is suitable for road construction and for the asphalt pavements with superior properties. This type of bitumen used in the manufacture of hot mix asphalt for bases and wearing courses and the main usage of this product is used in the road in tropical regions. the bitumen is provided during the presses of oxidation of vacuum bottom in bitumen production units. Due to its high air blowing and penetration, it is used in tropical areas with the Warm weather. It is not softened at high temperatures and does not fail its qualities.

Specification Bitumen Grade 40/50

Property	Specifications	Test Method
Penetration @ 25 °C	40/50	D – 5
Softening point °C	52/60	D–36

Ductility @25 °C	100 Min	D-113
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Loss on heating(wt) %	0.2 Max	D – 6
Flash point °C	250 Min	D–92
Solubility in CS2(wt) %	99.05 Min	D – 4
Drop in penetration after heating %	20 Max	D – 5
Density @25 °C	1.01/1.06	D–70/D–3289
Spot test	Negative	A.A.S.H.O.T1 02

Bitumen 50/70: is suitable for road construction and for the asphalt pavements with superior properties. This type of bitumen used in the manufacture of hot mix asphalt for bases and wearing courses and the main usage of this product is used in the road at tropical regions.

Specification bitumen grade 50/70

Property	Specifications	Test Method
Penetration @ 25 °C	50/70	D – 5
Softening point °C	46/54	D–36
Ductility @25 °C	100 Min	D–113
Loss on heating(wt) %	0.2 Max	D – 6
Flash point °C	240 Min	D–92
Solubility in CS2(wt) %	99.05 Min	D – 4
Drop in penetration after heating %	20 Max	D – 5
Density @25 °C	1.01/1.06	D–70/D–3289
Spot test	Negative	A.A.S.H.O.T102

Bitumen 60/70: is suitable for road construction and for the asphalt pavements with superior properties. This type of bitumen used in the manufacture of hot mix asphalt for bases and wearing courses and the main usage of this product is used in the road in mild regions. The bitumen is provided during the presses of oxidation of vacuum bottom in bitumen production units. Due to its medium air blowing and penetration, it is used in mild areas.

Specification Bitumen Grade 60/70

Property	Specifications	Test Method
Penetration @ 25 °C	60/70	D – 5
Specific Gravity @25/25 °C	1.01/1.06	D–70
Softening Point	48/56	D –36
Ductility @25 °C	100 Min	D–113

Loss on Heating(wt) %	0.2 Max	D – 6
Drop in Penetration after Heating %	20 Max	D–6 &D–5
Flash point °C	240 Min	D –92
Solubility in CS2(wt) % n CS2 (wt)	99.5 Min	D – 4
Spot test	Negative	A.A.S.H.O.T1 02

Bitumen 70/100: is suitable for hard penetration grade bitumen using as paving grade bitumen with superior properties suitable for road construction and repair also for the production of asphalt pavements with the below technical specification. This grade of bitumen is mainly used in the manufacture of hot mix asphalt for bases and wearing courses.

Specification Bitumen Grade 70/100

Property	Specifications	Test Method
Before Ageing		
Penetration @ 25 °C	70/100	D – 5
Softening Point	42/51	D –36
Dynamic viscosity @ 60 °C Pa.s.	75/-	D–4402
Dynamic viscosity @ 135 °C Pa.s.	0.15/0.40	D – 4402
After Ageing (RTFO)		
Dynamic viscosity @ 60 °C Pa.s.	-/300	D–4402
Softening point, °C	44/-	D – 36
Retained penetration, % of original	50/-	EN 1426
Spot test	30 Max	A.A.S.H.O.T102

Bitumen 80/100: is suitable for road construction and for the asphalt pavements with superior properties. This type of bitumen used in the manufacture of hot mix asphalt for bases and wearing courses.

Specification Bitumen Grade 80/100

Property	Specifications	Test Method
Penetration @ 25 °C	80/100	D – 5
Softening point °C	45/52	D–36
Ductility @25 °C	100 Min	D–113
Loss on heating(wt) %	0.5 Max	D – 6
Flash point °C	225 Min	D–92

Solubility in CS ₂ (wt) %	99.05 Min	D – 4
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Drop in penetration after heating %	20 Max	D – 5
Density @25 °C	1.01/1.06	D-70/D-3289
Spot test	Negative	A.A.S.H.O.T1 02

Bitumen 100/120: is Semi Hard penetration grade bitumen used as Paving Grade Bitumen. It is suitable for road construction and repair. It is also used for the production of Asphalt Pavements. This grade of bitumen mainly used in the manufacturing of hot mix asphalt for bases and wearing courses. Tiger Bitumen Asphalt 100-120 one of the most used bitumen grades and a basic material for all other bituminous products.

Specification Bitumen Grade 100/120

Property	Specifications	Test Method
Density	04/1-01/1	ASTMD-7
Penetration Rate at 25 °C	100 – 120	ASTMD-5
Softening point °C	42-49	ASTM D – 36
Ductility 25 °C (cm)	Min 100	ASTM D – 113
Flash point °C	Min 250	ASTM D – 92
Solubility Disulfide % wt.	5/99	ASTMD-4
Stain Test	Negative	AASHOT T 102
Weight Loss by Heating % Wt.	Max 20	ASTMD-6
Weight Loss by Heating %	Max 20	ASTM D-6/D-5

Bitumen 160/220: is a standard penetration grade Bitumen usually used as a Paving Grade Bitumen suitable for road construction and for the production of asphalt pavements with superior properties. This grade of Bitumen is mainly used in the manufacture of hot mix asphalt for bases and wearing courses.

Specification Bitumen Grade 160/220

Property	Specifications	Test Method
Penetration @ 25 °C	160/220	D – 5
Softening point °C	35/43	D-36
Ductility @25 °C	100 Min	D-113
Loss on heating(wt) %	0.2 Max	D – 6
Flash point °C	250 Min	D-92
Solubility in CS ₂ (wt) %	99.0 Min	D – 4
Drop in penetration after heating %	20 Max	D – 5

Density @25 °C	1.01/1.06	D-70/D-3289
Spot test	Negative	A.A.S.H.O.T1 02