

# PG 64 Bitumen

TEST METHOD	LIMIT	ASTM	AASHTO	PG-58-22	PG-70-16	PG-76-10	PG64-22
Flash point ( °C )	230 °C min	D92	T48	303	300	320	312
Rotational Viscosity@135 °C	3 Pa.s max	D4402	T316	0.282	0.425	0.425	0.323
DSR ( °C )				58	70	76	64
G*/sin ( °C ) 10 rad/s	1.0 K Pa Min	D7175	T315	1.51	1.1	1.2	1.14
RTFOT G*/sin ( °C ) 10 rad/s	2.20 K Pa Min	D7175	T315	2.71	2.3	2.25	2.9
Change of mass after RTFOT	1% Max	D2872	T240	0.08	0.12	0.12	0.06
PAV		D5621	R25		100 ( 110 ) ( °C ) T ( C° )		
RTFOT G*/sin ( °C ) 10 rad/s	K Pa 5000 Max	D57172	T315	3330	2440	2720	2950
BBR ( °C )				-12	-6	0	-12
Stiffness Mpa	300 Mpa Max	D6648	T313	266	206	176	234
m-valua	0.03 Min	D6648	T3123	0.309	0.32	0.35	0.3

PG64 bitumen is a type of performance bitumen specifically designed for use in road and construction projects. The number 64 refers to the maximum performance temperature of this bitumen, indicating that this bitumen can perform well at temperatures above 64°C.

## Physical Properties :

- Penetration Rate: Typically between 40 and 60 mm at 25°C.
- Softening Point: Minimum 46°C.
- Density: Typically between 1.01 and 1.03 g/cm<sup>3</sup>.
- Viscosity: Typically around 200 to 300 seconds at 100°C.

## Applications :

- Asphalt Construction: PG64 bitumen is used as one of the main ingredients in the production of asphalt for roads, highways and airport runways.
- Insulation: This bitumen is also used as insulation in various buildings and structures.
- Production of modified bitumen: PG64 bitumen is also used in the production of modified bitumen and emulsion bitumen.
- Performance at different temperatures : PG64 bitumen performs well at different temperatures due to its physical properties and can provide optimal performance in different weather conditions.
- Cracking resistance : This bitumen is well resistant to cracking and deformation at low temperatures.