

Bitumen Viscosity Grades

General of Viscosity Grades

VG-10 BITUMEN: VG-10 is widely used in spraying applications such as surface-dressing and paving in very cold climate in lieu of old 80/100 Penetration grade. It is also used to manufacture Bitumen Emulsion and Modified Bitumen products.

VG-20 BITUMEN: VG-20 is used for paving in cold climate & high altitude regions

VG-30 BITUMEN: VG-30 is primarily used to construct extra heavy duty Bitumen pavements that need to endure substantial traffic loads. It can be used in lieu of 60/70 Penetration grade.

VG-40 BITUMEN: VG-40 is used in highly stressed areas such as intersections, near toll booths and truck parking lots in lieu of old 30/40 Penetration grade. Due to its higher viscosity, stiffer Bitumen mixes can be produced to improve resistance to shoving and other problems associated with higher temperature and heavy traffic loads.

Characteristics	VG-10	VG-20	VG-30	VG-40
Absolute Viscosity,60°C,poises,min	800	1600	2400	3200
Kinematic Viscosity, 135°C,CST, min	250	300	350	400
Flash point, C , min	220	220	220	220
Solubility in Trichloroethylene,%, in	99.0	99.0	99.0	99.0
Softening Point, C ,min	40	45	47	50
Tests on Residue from thin film over test/RTFOT:				
i. Viscosity ratio at 60°C, max	4.0	4.0	4.0	4.0
ii. Ductility ratio at 25°C , cm,min,after thin film over test	75	50	40	25