PG 76-16 (PMB)

(Modified Performance Grade Bitumen)

PRODUCT DATA SHEET

Performance Grade (PG) bitumen PG 76-10 is a type of asphalt binder that falls within the Superpave Performance Grading (PG) system. This classification ensures that the bitumen can perform under specified temperature conditions, making it suitable for various demanding pavement applications.

CHARACTERISTICS	UNIT	LIMITS	TEST METHODS
Average 7-day maximum pavement design temperature	°C	<76	
Minimum pavement design temperature[a]	°C	>16	
Original Binder			
Flash Point	°C	Min. 230	AASHTO T48
Viscosity[b] @135°C	Pa.s	Max. 3.0	AASHTO T316
Dynamic Shear[c] , G*/sin δ[d] at 76°C at 10rad/s	kPa	Min. 1.0	AASHTO T315
Elastic Recovery	%	Min. 30	AASHTO T301
Residual Binder from Rolling Thin-Film Test (AASHTO T240 / ASTM D2872)			
Mass change[e]	%Wt	Max. 1.0	AASHTO T240
Dynamic Shear, G*/sin δ[d] at 76°C at 10rad/s	kPa	Min. 2.2	AASHTO T315
Pressure Aging Vessel Residue (PAV)			
PAV Temperature	°C	110	AASHTO R28
Dynamic Shear, G*.sin δ[d] at 34°C at 10rad/s	kPa	Max. 5000	AASHTO T315
Creep Stiffness[f] at -6°C			AASHTO T313
- S value	Mpa	Max. 300	
- M value (slope)		Min. 0.30	
Direct Tension[f] at, -6°C			AASHTO T314
- Failure strain, test temp @ 1.0 mm/min	%	Min. 1.0	

Notes:

a - Pavement temperatures are estimated from air temperatures using an algorithm contained in the LTPP Bind program, may be provided by the specifying agency, or by following the procedures as outlined in M323 and R35.

b - This requirement may be waived at the discretion of the specifying agency if the supplier warrants that the asphalt binder can be adequately pumped and mixed at temperatures that meet all applicable safety standards.

c - For quality control of unmodified asphalt binder production, measurement of the viscosity of the original asphalt binder may be used to supplement dynamic shear measurements of G*/sinδ at test temperatures where the asphalt is a Newtonian fluid.

d - G*/sin? = high temperature stiffness and G* sinδ = intermediate temperature stiffness.

e - The mass change shall be less than 1.00 percent for either a positive (mass gain) or a negative (mass loss) change.

f - If the creep stiffness is below 300 MPa, the direct tension test is not required. If the creep stiffness is between 300 and 600 MPa, the direct tension failure strain requirement can be used in lieu of the creep stiffness requirement. The m-value requirement must be satisfied in both cases.

Quality:

Certification is conducted through our in-house testing laboratory, and witness testing protocols are available before cargo release. We ensure the quality of bitumen for every delivery by arranging for an international inspector to assess quality.

Application:

PG 76-16 bitumen is a polymer-modified asphalt binder

Packaging:

New steel drums, reconditioned steel drums or eco-friendly Weatherproof packaging in poly bags and also in Bulk.

Steel Drums: 150Kg, 180Kg, 200Kg

Poly Bags: 300Kg, 1000Kg

designed for use in regions with extremely high temperatures and moderate cold weather. Its high resistance to rutting and crack prevention properties make it ideal for high-traffic roads, airports, bridges, and industrial pavements, ensuring long-lasting and durable performance in demanding environments.

Proper storage and handling are crucial for maintaining its quality and ensuring optimal performance.

Health & Safety:
Bitumen is unlikely to present any significant health or safety hazard when properly used in the recommended application, provided good standards of industrial and personal hygiene are maintained.

Bulk: Bitumen Tank Container

Code Approvals/Compliance:
Meets AASHTO M 320-16

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