



TECHNICAL DATA SHEET (TDS)

Viscosity Grade Bitumen VG 20

Product Name: Viscosity Grade Bitumen VG 20

Grade: VG 20

Product Type: Paving Grade / Viscosity Grade Bitumen

Physical Form: Semi-solid to solid at ambient temperature

Color: Black to dark brown

Primary Applications: Asphalt paving, hot mix asphalt, flexible pavements, road construction and maintenance

Product Description

Viscosity Grade Bitumen VG 20 is a petroleum-based asphalt binder classified according to its viscosity characteristics. It provides an intermediate viscosity level between VG 10 and VG 30. Therefore, it can provide a practical balance between asphalt workability and resistance to deformation where project specifications require VG 20.

VG 20 Bitumen is primarily suitable for road construction, asphalt manufacturing, flexible pavements, and hot mix asphalt applications. However, engineers should select the final binder grade according to pavement design, climate, traffic loading, aggregate characteristics, and applicable standards.

Technical Specifications

The following requirements correspond to **VG 20 under IS 73:2013**. Actual batch results should appear on the supplier's Certificate of Analysis (COA).

Property	Test Method	VG 20 Requirement
Absolute Viscosity at 60°C	IS 1206 (Part 2)	1,600–2,400 Poise
Kinematic Viscosity at 135°C	IS 1206 (Part 3)	Min. 300 cSt
Penetration at 25°C, 100 g, 5 sec	IS 1203	Min. 60 (0.1 mm)
Softening Point, Ring & Ball	IS 1205	Min. 45°C
Flash Point, Cleveland Open Cup	IS 1448 [P:69]	Min. 220°C
Solubility in Trichloroethylene	IS 1216	Min. 99.0%
Viscosity Ratio at 60°C After Aging	IS 1206 (Part 2)	Max. 4.0
Ductility at 25°C After Aging	IS 1208	Min. 50 cm



Important: These values represent specification limits for VG 20 under IS 73:2013, not guaranteed typical production values. Project specifications or national standards may require different limits. Therefore, buyers should confirm the applicable specification and review the batch-specific COA before acceptance.

Key Properties

Viscosity Grade Bitumen VG 20 offers controlled viscosity at both service and asphalt-processing temperatures. Moreover, its consistency supports predictable mixing, pumping, coating, and compaction when operators use appropriate temperatures.

The binder also provides good adhesion to suitable aggregates when the asphalt mixture receives proper design and preparation. Additionally, its intermediate consistency can support pavement stability under appropriate climate and traffic conditions.

Typical Applications

VG 20 Bitumen can serve in:

- Hot mix asphalt production
- Flexible pavement construction
- Asphalt road paving
- Road rehabilitation and maintenance
- Binder and wearing courses where specified
- Asphalt manufacturing plants
- Municipal and infrastructure projects
- Moderate-temperature road construction projects

Final suitability depends on the approved mix design and project specification.

Packaging

Viscosity Grade Bitumen VG 20 may be supplied in:

- **New steel drums**
- **Bulk tanker shipments**
- **Bulk vessel shipments**, where logistics and order volume allow
- **Other export-suitable packing**, subject to supplier availability

Packaging size, drum weight, container loading quantity, and bulk availability may vary according to destination and transportation requirements.



Storage and Handling

Store VG 20 Bitumen in suitable tanks and use controlled heating equipment. Furthermore, avoid unnecessary overheating or prolonged exposure to elevated temperatures because excessive heat can accelerate binder aging.

Keep tanks, transfer lines, valves, and pumps suitable for hot bitumen service. Additionally, workers should use appropriate PPE and follow established procedures for handling hot asphalt materials.

Always consult the current **VG 20 Bitumen MSDS/SDS** before storage, heating, transportation, or use.

Safety Information

Hot bitumen can cause severe thermal burns. Therefore, personnel should use appropriate protective clothing, heat-resistant gloves, eye and face protection, and suitable footwear.

Avoid contact with hot material and minimize exposure to fumes generated during heating. Moreover, maintain adequate ventilation around heated bitumen operations.

For complete hazard, first-aid, firefighting, accidental-release, exposure-control, and transportation information, refer to the current supplier **Safety Data Sheet (SDS/MSDS)**.

Quality Documentation

For commercial orders, buyers may request relevant documentation such as:

- Technical Data Sheet (TDS)
- Safety Data Sheet (SDS/MSDS)
- Certificate of Analysis (COA)
- Packing details
- Shipping documents
- Inspection documentation, when agreed

Commercial Information

Product: Viscosity Grade Bitumen VG 20

Grade: VG 20

Supply Form: Drums / Bulk, subject to availability

Market: International B2B supply



Supplier: Basekim

Quotation Basis: Quantity, packing, destination and Incoterm

For an updated quotation, buyers should specify the required quantity, destination port, preferred packaging, applicable technical standard, and delivery terms.

Technical Note

This Technical Data Sheet provides general product information. It does not replace a project specification, contractual specification, batch-specific Certificate of Analysis, or Safety Data Sheet. Buyers should verify **Viscosity Grade Bitumen VG 20** against the applicable standard and project requirements before use.