



SPECIFICATION OF BITUMEN VG10



Introduction

BS group Bitumen Grade VG 10 is a standard viscosity grade Bitumen usually used as a paving Bitumen suitable for road construction and other industrial purposes. This grade of Bitumen is mainly used in the manufacture of hot mix asphalt for bases especially in cold climate and wearing courses.

Typical properties

Characteristics	VG-10	Test
Kinematic Viscosity, 135°C, CST, min	800	IS1206
Flashpoint, C, Max	250	IS1448
Flashpoint, C, min	220	IS1448
Solubility in trichloroethylene, %, min	99.0	IS1216
Penetration at 25°C	80-100	IS203
Softening point, C, min	40	IS1205
Tests on residue from thin film over test / RTFOT		
I. Viscosity ratio at 60°C, max	4.0	IS1206
II. Ductility at 25°C, cm, min	75	IS1208

Applications

Bitumen VG-10 is mostly utilized in spraying usages such as surface dressing and also paving in cold weather as a replacement for old 80/100 Penetration grade. It can also be used in the production line of Bitumen Emulsion and Modified Bitumen types. Bitumen VG10 can be used for producing some kind of asphalt primer and Waterproofing products as well.

Hazard Identification

NOT classified as dangerous in accordance with Directive 67/548/EEC or EC 1272/2008.

The main hazards presented by Asphalt relate to the temperature of the material. The following hazards may apply:

- Hot materials may burn the skin.

- Fumes from Asphalt are unlikely to be hazardous when laid in open air situations, but there may be a risk to health by continuous inhalation of high vapor concentrations which might arise in poorly ventilated, confined or semi-confined spaces.

- Asphalt is not a dusty material, but respirable dust may be released by cutting, drilling or planing hardened asphalt. If inhaled in excessive quantities over a prolonged period or extended period, respirable dust can constitute a long term health hazard.

Dusts containing Respirable Crystalline Silica* (quartz) present a greater hazard. Long-term exposure to respirable dust can lead to respiratory system damage and disease. Respirable crystalline silica* has been associated with the lung disease silicosis.

The quartz content of the product will vary, and is related to the type of aggregate used in the production of the asphalt. Advice on the quartz content and other chemical information is available from the supplying unit.

Fire Fighting Measures

Suitable Extinguishing Media: Dry powder, foam.

Unsuitable Extinguishing Media: Do not use water. CO₂ is also not suitable.

Special Exposure Hazards in Fire: Hydrocarbon fumes may be released, along with other hazardous combustion products including smoke.

Special Protective Equipment for Fire Fighters: Proper protective equipment including suitable respirators or breathing apparatus must be worn.

Handling and Storage

Handling:

Skin contact with the product should be avoided. Inhalation of fumes should be avoided as far as is reasonably practicable.

If the formation of vapors is a risk, then additional ventilation should be provided. Handle away from sources of ignition and heat. Do not smoke, eat or drink during use.

Storage:

No special requirements. Asphalt is normally used upon receipt.

Refer to the relevant Technical Data Sheet for the specific product.

Cleaning

Tools: Clean with kerosene and gasoline.

Hands: Use a hand cleanser or kerosene followed by soap and water.

Availability

BS group Bitumen Penetration Grade VG10 is available in:

- Bulk
- New Steel Drums (185 Kg) and (150 Kg)