



## SPECIFICATION OF BITUMEN VG30



### Introduction

BS group Bitumen Grade VG 30 is a standard viscosity grade Bitumen usually used as a paving Bitumen suitable for road construction and other industrial purposes. Bitumen VG-30 is one of the grades in high demand, and oxidation of vacuum bottom in distillation tower is used to produce it. This grade of Bitumen is mainly used for hot mix especially in moderate climate.

### Typical properties

| Characteristics  | VG-30 | Test   |
|--|-------|--------|
| <b>Kinematic Viscosity, 135°C, CST, min</b>              | 2400  | IS1206 |
| <b>Flashpoint, C, Max</b>                                | 350   | IS1448 |
| <b>Flashpoint, C, min</b>                                | 220   | IS1448 |
| <b>Solubility in trichloroethylene, %, min</b>           | 99.0  | IS1216 |
| <b>Penetration at 25°C</b>                               | 50-70 | IS203  |
| <b>Softening point, C, min</b>                           | 47    | IS1205 |
| <b>Tests on residue from thin film over test / RTFOT</b> |       |        |
| <b>I. Viscosity ratio at 60°C, max</b>                   | 4.0   | IS1206 |
| <b>II. Ductility at 25°C, cm, min</b>                    | 40    | IS1208 |

### Applications

The most common application of bitumen VG-30 is basically in constructing heavy duty Bitumen pavement projects that must withstand a significant traffic load. Also, VG30 is widespread in road construction, waterproofing, building construction subsidiary and also in cutback bitumen production. It can be a replacement for 60/70 Penetration grade as well. It is the most suitable for using in hot and rainy weather which can cause many problems in paving and also a good choice for mild regions.

### 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 planning 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. CO<sub>2</sub> 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 VG30 is available in:

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

# Data Sheet