



SPECIFICATION OF BITUMEN MC3000



Introduction

BS group Bitumen MC3000 is the Medium-Curing type of cutback bitumen that dissolved of bitumen in solvents of kerosene. In many countries, kerosene and other volatile petroleum-derived products are added as a cutter or cutback agent to bitumen to reduce (or cutback) the viscosity of the bitumen.

Typical properties

Bitumen MC 3000		
Characteristic	Value	Test Method
Kinematic Viscosity@ 60°C (cSt)	3000-6000	ASTM D-2170
Flash Point (top open cuo) (°C)	66 min	ASTM D-3143
Water Content (%vol)	0.2 max	ASTM D-95
Distillate, %volume of total distillate to @ 360°C:		
to 225°C	—	ASTM D-402
to 260°C	0-15	
to 316°C	15-75	
Residue from Distillation to 360°C (%Vol by difference)	80 min	ASTM D-402
Test on Residue from Distillation		
Penetration @ 25°C (dmm)	120-250	ASTM D-5
Ductility @ 25°C (cm)	100 min	ASTM D-113
solubility in Trichloroethylene (%wt)	99 min	ASTM D-2042

Applications

This kind of bitumen is normally used in the construction and treatment of pavements as per ASTM D2028-97 reapproved in 2004. Cutback Grade Bitumen is normally used in spraying and in some mixing applications.

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. 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 MC3000 is available in: Bulk and New Steel Drums (185 Kg)