



SPECIFICATION OF BITUMEN 30/40



Introduction

BS group Bitumen Grade 30/40 is semi-hard penetration grade bitumen used as a paving grade bitumen which is suitable for road construction and repair. It is also used for the production of asphalt pavements with technical specifications listed below.

Penetration grade bitumen are specified by the penetration and softening point test. Penetration grade bitumen have a thermoplastic property which causes the material to soften at high temperatures and to harden at low temperatures.

Typical properties of BS group Bitumen 30/40

Here are properties of BS group Bitumen grade 30/40 which is classified by ASTM D946-09/EN12591.

Description	Unit	Limit	Test Method
Density@25°C	Kg/m ³	1010-1060	ASTM D70 or D3289
Penetration@25°C	mm/10	30-40	ASTM D5
Softening Point	°C	55-63	ASTM D36
Ductility@25°C	cm	100 min	ASTM D113
Loss on Heating	wt%	0.2 max	ASTM D6
Drop in Penetration after Heating	%	20 max	ASTM D5
Flash Point	°C	250 min	ASTM D92
Solubility in Trichloroethylene	wt%	99.5 min	ASTM D2042
Spot Test	---	Negative	A.A.S.H.O.T.102

Applications

Bitumen 30/40 is used in the manufacturing of hot mix asphalt for bases and wearing courses. Bitumen penetration grade 30/40 is one of the most used bitumen grades and it's a basic material for all other bituminous products.

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 Penetration Grade 30/40 is available in:

- Bulk
- New Steel Drums (185 Kg, 210kg, 240kg and 150 Kg)

