TECHNICAL DATA SHEET

Penetration grade bitumen 30/40

DESCRIPTION

Bitumen by definition is, a variety of mixtures of hydrocarbons, derived from the refining of crude oil. It is a thermoplastic material and its stiffness is dependent on temperature. The temperature vs. stiffness relationship of bitumen is dependent on the source of crude oil and the method of refining. Main usage is road surfacing and water-proofing.

Bitumen is completely soluble in carbon disulphide (CS2), and has adhesive and water-proofing capabilities. It consists mainly of hydrocarbons and is typically made from about 80% carbon and 15% hydrogen, with balance amounts being oxygen, nitrogen and other trace particles. Penetration grade bitumen is commonly used in road surfacing, and minor industrial applications.

Penetration determines the hardness of bitumen by measuring the depth to which a standard loaded needle will vertically penetrate in 5 seconds, in a sample of bitumen maintained at a temperature of 25 degrees Celsius.

SPECIFICATION

	Value	Test Method
Specific Gravity @ 25/25 deg. C.	1.01/1.06	ASTM D.70
Penetration @ 25 deg. C.	30/40	ASTM D.5
Softening Point deg. C.	55/63	ASTM D.36
Ductility @ 25 deg. C. CMS	100 min.	ASTM D.113
Loss on heating PCT. WT.	0.2 max.	ASTM D.6
Drop in penetration after heating PCT.	20 max.	ASTM D.5
Flash point deg. C.	250 min.	ASTM D.92
Solubility in CS2 PCT. WT.	99.5 max.	ASTM D.4
Organic matter insoluble in CS2 PCT. WT.	0.2 max.	ASTM D.4
Ductility at 25°C, 5cm/min, cm after thin-film oven test	50 min.	ASTM D. 946/D. 946M-09a
SPOT TEST	Negative	AASHO T 102-42

PACKING

Bitumen is commonly packed in new steel drums of various sizes, although other forms of packing are available depending on the origin, and the distance between place of manufacture, and place of consumption.

HEALTH & SAFTY

Please check the Material Safety Data Sheet (MSDS) provided with this document