

## PRODUCT DATA SHEET

## PENETRATION BITUMEN. EDITION 11.

## **BITUMEN GRADE 50/70**

PROPERTY / UNIT	SPECIFICATION	TEST METHOD
Penetration at 25°C	50-70	ASTM D5
Ductility at 25°C CMS	100 Min	ASTM D113
Softening point (°C)	49-56	ASTM D36
Loss on heating PCT WT	0.2 Max	ASTM D6
Drop in Penetration after heating (%)	20 Max	ASTM D5
Flash Point (°C)	250 Min	ASTM D92
Solubility in CS2 PCT WT	99.5 Max	ASTM D4
Density / S.G. at 25°C	1.00 / 1.05	ASTM D70
Organic matter insoluble in CS2 PCT WT	0.2 Max	ASTM D4
Spot Test	Negative	AASHTO

**Penetration Grade Bitumen** is commonly used in road construction, surfacing and some industrial applications. Additional processing of this type of Bitumen yields various grades of Bitumen products. The Penetration Test determines the hardness of Bitumen by measuring the depth ( in tenths of a mm) to which a standard, and loaded needle will vertically penetrate in 5 seconds, a sample of Bitumen maintained at a temperature of 25°C. Hence the softer the bitumen, the greater will be its number of penetration units. Bitumen Grade 50/70 is commonly used to manufacture Asphalt Mixes, Cut-back Bitumen, Bitumen Emulsions and Modified Bitumen.

**Quality:** All Bitumen supplied is of the highest quality and fully compliant with ASTM and AASHTO, equivalent EN and BS International Standards and Test Methods. SGS Quality Testing and Analysis certification of the Bitumen products inspected when requested, will be compliant with Product Specifications and International Standards. Quality assured manufacturing. Equivalent to BS EN 12591 and BS EN 13924.

Packaging: New steel drums, reconditioned steel drums or eco-friendly poly bags. Weatherproof packaging.

**Storage and Handling Recommendations:** Store in unopened containers. Storage temperature limits 1°C - 50°C. For normal operations, such as blending and transferring liquid bitumen, temperatures of 10°C - 40°C above the minimum pumping temperature are recommended.

 $\textbf{Recommended Application Temperatures: Storing:}\ 120^{\circ}\text{C} - 150^{\circ}\text{C}.\ \textbf{Mixing:}\ 135^{\circ}\text{C} - 155^{\circ}\text{C}.\ \textbf{Compacting:}\ 125^{\circ}\text{C} - 145^{\circ}\text{C}$