

## CUTBACK BITUMEN MEDIUM SETTING (MC-30)

All cutback grades of bitumen exported by BUOYANCY™ are fully compliant to ASTM D2026, D2027, D2028, AASHTO M82-75 (2008), ASTM D2028 or AASHTO M92-92 (2008) standards equivalent to BS EN 15322. Cutback Bitumen is made by reducing the viscosity of penetration grade bitumen by adding petroleum type solvent like kerosene etc. Cutback Bitumen is used because its viscosity is lower than that of neat asphalt. The mixture obtained may be called cutback bitumen. The reduction in viscosity of the bitumen aids the construction of seal coats in road pavements as the softened mixture wets the chips more easily. The cutback agent evaporates from the seal coat, the cutback agent becoming a negligible component of the seal coat a few months after application.

### Applications of Cutback Bitumen MC-30

#### Prime and Tack Coating

The process of priming involves applying a low viscosity binder to a prepared but usually unbound aggregate base. It is intended to be absorbed by the top layers of the base and provide a surface more easily 'wetted' by a subsequent bituminous covering. The primer will be able to carry traffic for a short time (although this practice is uncommon) and help control dust. Generally, primers are applied at rates between 0.5 and 1.4 L/m<sup>2</sup>. Cutback bitumen suitable for priming is also used for tack coats, which are applied to an underlying surface to help with the adhesion of subsequent asphalt layer. A typical application rate is between 0.2 and 0.4 L/m<sup>2</sup>.

#### Prime Sealing

Where temperatures are too cool for an effective priming operation, or where traffic is likely to upset a primed surface before the final seal can be sprayed, a primer seal can be used to give adequate protection of the pavement for periods of up to 6 to 12 months. Cutback bitumen suitable for primer sealing can also be used in the manufacture of pre-mix asphalt, which is used in patch repairs.

#### Spray Sealing

Cutback bitumen is used extensively in sprayed sealing applications, particularly in cooler weather where they provide improved initial stone retention due to their lower viscosity. Typically, a single application of the appropriate cutback bitumen is sprayed onto the primed pavement onto which aggregate is laid.

### TECHNICAL SPECIFICATIONS (Typical)

PROPERTIES	MIN	MAX	TEST METHOD
Kinematic viscosity at 60°C, mm <sup>2</sup> /s	30	60	ASTM D2170
Flash Point( Cleveland open cup),°C	38	-	ASTM D92
<b>Distillation Test: Distillate volume percent of total distillate to 360°C</b>			
To 225°C	-	35	ASTM D402
To 260°C	30	75	ASTM D402
To 316°C	75	95	ASTM D402
Residue from Distillation to 360°C	50	-	ASTM D402
<b>Test on Residue from Distillation</b>			
Ductility at 25°C, CM	100	-	ASTM D402 / ASTM D113
Solubility in Trichloroethylene %	99.0	-	ASTM D402 / ASTM D2024
Water, % Volume	-	0.2	ASTM D95
Viscosity at 60°C	30	120	

**Packing: 190-210 KG Net weight steel drums on pallets and shrink wrapped**