

# CUTBACK BITUMEN MC-30/MC-70

## Product data sheet

### DESCRIPTION :

**CUTBACK BITUMEN (Liquid Bitumen)** is a mixture of petroleum solvent & bitumen. Typical solvents include naphtha (gasoline) and kerosene. The type of solvent controls the curing time and its ultimate strength. Solvent is added to reduce the viscosity of the bitumen temporarily so that it can penetrate pavements more effectively or to allow spraying at temperatures that are cold for successful sprayed sealing. The solvent will evaporate after the spraying to leave the remaining material similar in hardness to that of the original

### FEATURES :

- Cutbacks have higher residual bitumen percentage than emulsions, typically over 80 percentages compares with 65 percentages for bitumen emulsion.
- Higher Bitumen cement left on the roadway after curing, for the same volume of binder applied.

### APPLICATION :

Bitumen Cutback is used for a wide range of application which includes the following:

- 1. Priming & Tack Coat** – Cutback bitumen's suitable for priming are also used for tack coats, which is applied to an underlying surface to help with adhesion of subsequent asphalt layer. A typical rate of application between 0.2 to 0.4 liters /sq.m.
- 2. Primer Sealing** - Where the temperatures are too cool for an effective priming, or where traffic is likely to upset a primed surface before the final seal sprayed, a primer seal can be used to give adequate protection of the pavement for periods up to 6 ~ 12 months. Cutback bitumen's suitable for primer sealing can also be used in the manufacture of Pre -mix asphalt, which is used in patch repairs.
- 3. Sprayed Sealing** - Cutback bitumen's are used extensively in sprayed sealing applications, particularly in cooler weather where they improved initial stone retention due to their low viscosity.

### SUPPLY :

- Steel drums (palletized)
- Bulk tankers

### CLEANING :

**Tools:** Clean with Kerosene

**Hand:** Use a hand cleanser or kerosene followed by soap and water.

## HEALTH & SAFETY :

- Wear suitable personal equipment (PPE) at all times. Full skin protection is required to avoid accidental burns when transferring or handling bitumen.
- Always prevent contact between water and hot bitumen by checking the contents of the previous load before loading bituminous products into bulk tankers and by strictly follow the procedures to avoid frothing and boil over of tanks.
- Avoid exposure to fumes by standing back on the gantry or up wing until the vapours have dispersed.
- Minimize bitumen fume by heating bitumen and asphalt products to the recommended temperatures.
- Minimize the use of diesel when cleaning equipment as this contributes to the bitumen fume. Cutbacks are sometimes used at a temperature above their flash point, so care must be taken regarding the products flammability. Ensure personnel are well trained in the correct handling & safety procedures.

## TECHNICAL DATA :

| PROPERTIES   | VALUES   |          | STANDARD    |
|--|----------|----------|-------------|
|  | MC-30    | MC-70    |             |
|  | Min./Max | Min./Max |             |
| Kinematic viscosity @ 60°C (mm <sup>2</sup> /s) (cSt)                  | 30/60    | 70/140   | ASTM D-2170 |
| Flash point (TOC) (°C)   | Min.38   | Min.38   | ASTM D-1310 |
| Distillate: Distillate, Volume percentage of total distillate to 360°C |          |          |             |
| to 225°C   | --/35    | --/25    | ASTM D-402  |
| to 260°C   | 30/75    | 10/70    | ASTM D-402  |
| to 316°C   | 75/95    | 65/93    | ASTM D-402  |
| Residue from distillation to 360°C, percentage volume by diff.         | 50/--    | 55/--    | ASTM D-402  |
| Test on residue from distillation:                                     |          |          |             |
| Penetration @ 25°C, 100g, 5s   | 120/300  | 120/300  | ASTM        |
| Ductility @25°C,cm   | 100/ --  | 100/ --  | ASTM D-113  |
| Solubility in Trichloroethylene  | 99/ --   | 99/ --   | ASTM D-2024 |
| Water content,% volume   | --/0.2   | --/0.2   | ASTM D-95   |

# Cutback bitumen MC- 30/MC -70 conforms to the requirements of ASTM D - 2027/ASTM D- 2027M- 13.