

## Cutback Bitumen

### Prime Coat MC – 70

MC-70 is a liquid petroleum product produced by fluxing penetration grade bitumen with suitable petroleum diluents. It is a medium curing cutback asphalt consisting of penetration grade asphalt cement and diluent or cutter of medium volatility. The diluent temporarily reduces the viscosity of the asphalt cement for ease of handling and application. After application the diluent evaporates, leaving the asphalt cement to perform its function.

#### USES & APPLICATION

MC 70 is suitable for use in the construction and maintenance of pavement as designated in ASTM D2399. MC70 is commonly used in the road construction industry as a prime coat of the road base prior to placing of the bituminous layer. Its purpose is to bind the granular material of the road base to the bituminous layer.

#### COMPLIANCE SPECIFICATION

Medium curing cut back asphalt complies with ASTM D2027 and AASHTO M82.

#### DIRECTION FOR USE

1. Heating of MC 70 is required for spray application.
2. Special care must be taken whilst heating, as MC 70 contains flammable cutters which have a flash point of  $\geq 38^{\circ}\text{C}$ .
3. Before priming, the surface of the base course should be well swept.
4. The moisture content of the base course should be less than 50% of the Optimum Moisture Content.
5. If the base is very dry, dampen slightly with water to prevent the formation of “fish eyes”.
6. Apply with a calibrated distributor at a minimum binder spray temperature of  $55^{\circ}\text{C}$  and road surface temperature of  $10^{\circ}\text{C}$  and rising.
7. Drying time is dependent on the porosity of the base course as well as on the prevailing weather conditions. The prime must be allowed to dry before opening to traffic or proceeding with the construction of the surfacing.

#### PACKING

In Road Tankers, Steel drums and cans.

## COVERAGE

Priming is accomplished by spraying 0.45 to 1.75 liters/m<sup>2</sup>, the exact rate depends on the porosity of the prepared soil surface.

## STORAGE AND APPLICATION

- Keep drums in a cool, well-ventilated place.
- Keep away from the source of ignition.
- Prevent ingress of water.
- Storage Temperature ambient to 60°C. Application Temperature 30°C to 80°C.
- Usual application is by spray using a distributor.

Typical Properties				
Characteristics	Test Method	Unit	Min	Max
Kinematic Viscosity at 60 <sup>o</sup> C	ASTM D 2170	mm <sup>2</sup> /s	79	140
Flash Point – Tag Open Cup	ASTM D 3143	°C	38	
Water content	ASTM D95	%	-	
Distillation test	ASTM D 402			
Distillate %V of total distillate up to 360 <sup>o</sup> C	-	-	-	-
to 225 <sup>o</sup> C	-	%		20
to 260 <sup>o</sup> C	-	%	20	60
to 316 <sup>o</sup> C	-	%	65	90
Residue from Distillation to 360 <sup>o</sup> C	ASTM D 402	%	55	
Tests on Residue from Distillation	-	-	-	
Absolute Viscosity at 60 <sup>o</sup> C	ASTM D2171	Pas	30	120
Solubility in Trichloroethylene	ASTM D2042	%	99	
Ductility at 25 <sup>o</sup> C, 5 cm /min	ASTM D 113	Cm	100	

## HEALTH & SAFETY

Cutback bitumen products are flammable, hence must be protected from the source of ignition. It is advised to use adequate Personal Protection Equipment during, handling and application. Avoid contact with skin, eyes and clothing Avoid breathing vapor, spray or mists .Do not breath fumes, which may accumulate in the vapor headspace of containers Keep product in well-ventilated storage tanks. Keep away from sources of ignition. Prevent ingress of water.

LEGAL NOTES: MENA ENERGY reserves the right to change or modify the data without prior notice. All reasonable care has been taken in compiling the data that to the best of our knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with MENA ENERGY recommendations is accurate and true. All recommendations are made in good faith. No responsibility can be accepted by us and no warranty is implied with regards to any recommendations made in this data sheet, since the conditions of actual use, method of application and the labour involved are beyond our control.