

COMPOSITION

The MICROAD™ Slurry System is composed of aggregate, emulsified asphalt, cement, and water. These components are mixed together according to laboratory designed formulations. The asphalt emulsion binds the crushed aggregate together and adheres the new slurry surface to the old surface over which it is applied. Various grades of emulsions and aggregates can be used to meet certain conditions, specifications, and requirements of individual projects.

CHARACTERISTICS

Emulsions of different compositions and drying times are mixed with any one of three grades of aggregates to create a slurry seal mix for specific pavements. The different aggregate types are I (fine), II (general), and III (coarse). Fine aggregates are used for maximum crack penetrations and sealing in low traffic areas. Type II aggregates are most widely used for moderate-to-heavy traffic areas. Their main objective is to seal, correct ravelling and oxidation, and improve skid resistance. Type III corrects severe surface conditions, prevents hydroplaning, and provides skid resistance under heavy traffic loads. Slurry seal can be designed to fit almost any need.

APPLICATION

The MICROAD™ Slurry System is applied to existing pavements using specifically calibrated equipment. These specialized machines carry all components, mixes them on site, and spreads the mixture onto the road surface. Materials are continuously and accurately measured, and then thoroughly combined in the MICROAD™ surfacing machine's mixer. As the machine moves forward, the mixture is continuously fed into a full-width surfacing box which spreads the width of a traffic lane in a single pass. This insures uniform application of the new surface and it is constructed so that close contact with the existing surface is maintained throughout.

CAUTIONS

Contains asphaltic materials. Harmful or fatal if swallowed. Do not induce vomiting. Avoid prolonged contact with skin and breathing of vapors. Flush skin with water immediately. Use with adequate ventilation. In case of contact with eyes, flush eyes with water and call a physician.

EMULSION SPECIFICATIONS

MICROAD™ Slurry Seal Asphalt Emulsion

Tests on Emulsion	Method	Min.	Max.
Viscosity, Saybolt Furol @ 77°F, seconds	AASHTO T-59	20	100
Storage Stability Test ¹ , 24 hr, percent	AASHTO T-59		1
Particle Charge Test ²	AASHTO T-59	Positive	
Cement Mixing Test, percent	AASHTO T-59		2
Sieve Test ³ , percent	AASHTO T-59		0.1
Residue, percent	AASHTO T-59	57	
Tests on Residue From Distillation			
Penetration, 77°F, 100 g, 5 seconds	AASHTO T-49	40	90
Ductility, 25° C, 5 cm/min, cms	AASHTO T-51	40	
Solubility, in Trichloroethylene, percent	AASHTO T-44	97.5	

¹The storage stability test may be waived provided the asphalt emulsion storage tank at the project site has adequate provisions for circulating the entire contents of the tank, and provided satisfactory field results are obtained.

²If the particle charge test is inconclusive, material having a maximum pH value of 6.7 will be adequate.

³The sieve test may be waived if successful application of the material has been achieved in the field.