

SECTION 21: ASPHALT REJUVENATING AGENT FOR HEATER REMIX OPERATIONS

21-01 MATERIALS AND CONSTRUCTION. The asphalt rejuvenating agent (Cationic Maltenes Emulsion) shall be composed of a petroleum resin oil base uniformly emulsified with water. The asphalt rejuvenating agent shall conform to the following requirements:

<u>Specification Designation</u>	<u>Test Method</u>	<u>Requirements</u>
Viscosity, S.F., at 77°F., Seconds	AASHTO T59	15-40
Residue - % Min.	Calif. 351	60
Cement Mixing Test, Percent	AASHTO T59	Zero
Sieve Test* (Distilled Water) % Max.	AASHTO T59	0.10
Particle Charge Test	Calif. 343A	Positive
Tests on Residue from Calif. 351 Viscosity, CS, 140°F	ASTM D445	100- 200
Asphaltenes, % Max.	Calif. 352	0.75

* Test procedure identical with AASHTO T59 except that distilled water shall be used in place of two percent (2%) sodium oleate solution.

Water shall be added to the material and mixed therewith in such a proportion that the resulting mixture shall have the following approximate proportions:

1 Part Water to 2 Parts of Emulsion

The exact quantity of added water will be determined by the Engineer.

Asphalt rejuvenating agent shall be applied by means of a distributor truck. Distributor trucks shall be of the pressure type with insulated tanks and in general shall conform to the requirements stated in Section 93-1.03, "Mixing and Applying," of the Standard Specifications.

The asphalt rejuvenating agent shall not be applied when the atmospheric temperature is below fifty degrees (50°). Asphalt rejuvenating agent shall be placed within twenty-four (24) hours after the placement of asphalt concrete.

The rate of spread for the diluted asphalt rejuvenating agent shall be approximately 0.05 gallon per square yard. The exact rate of application shall be determined by the Engineer. In the event that the pavement surface to be open to traffic becomes slippery after the application of asphalt rejuvenating agent, a sand coat shall be applied to absorb the excess asphalt rejuvenating emulsion.

21-02 MEASUREMENT. The quantity of asphalt rejuvenating agent per ton to be paid for shall be determined from a weight certificate which shall be furnished for each truckload delivered, certifying the net weight. At the end of each workday, total weight tags shall be delivered to the Engineer from the material supplier.

21-03 PAYMENT. The contract price paid per ton of diluted asphalt rejuvenating agent shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals including, but not limited to, sweeping streets, flagmen, sand, barricades and "No Parking" signs, and for doing all the Work in placing the material, complete and in place, all as required in the Special Provisions, shown on the Plans, specified in these Standard Provisions and directed by the Engineer.