

**SECTION 1031 -- EMULSIFIED ASPHALT (ANIONIC)**

**1031.01 -- Description**

Emulsified asphalt (anionic) shall conform to the requirements of AASHTO M 140.

**1031.02 -- Material Characteristics**

HFE-150, HFE-300, and HFE-1000 shall meet the requirements in Table 1031.01

**Table 1031.01**

<b>Anionic Emulsified Asphalt</b>		
<b>HFE-300</b> - used for warm weather windrow mixes, base stabilization, or pug mill mixes.		
	<b>Min.</b>	<b>Max.</b>
Saybolt Furol Vs. @ 50°C	50	400 sec.
Settlement, 5 days %		5
Sieve Test, %		0.10
Residue by distillation	65	
% Oil Distillation		7
Residue Penetration	300	
Residue Solubility in Trichloroethylene 1%	97.5	
Float Test on Residue, 60°C sec	1200	
<b>HFE-150</b> - sand seal, chip seal, especially with more graded or dusty materials.		
	<b>Min.</b>	<b>Max.</b>
Saybolt Furol Vis. @ 50°C	50	400 sec.
Settlement, 5 days %		5
Sieve Test, %		0.10
Residue by distillation, %	65	
Residue Penetration	300	
25°C, 5 sec, 100 g	150	250
Residue Solubility in Trichloroethylene 1%	97.5	
Float Test on 60°C sec	1200	
<b>HFE-1000</b> - winter mix		
	<b>Min.</b>	<b>Max.</b>
Viscosity, Saybolt Furon at 50°C sec	50	400 sec.
Oil Distillates by volume of emulsion, %	---	7
Residue by distillation, %	65	
Tests on Residue from Distillation Test:		
Viscosity by Vacuum Capillary Viscometer at 60°C, Poises	20	90
Penetration, 25°C, 100 g, 5 sec	300	---
Float Test at 60°C, sec	1200	

### **1031.03 -- Acceptance Requirements**

Emulsified asphalt (anionic) will be accepted as prescribed in the NDR *Materials Sampling Guide*.