PEP
Technical Data Sheet

Penetrating Emulsion Prime

PEP asphalt emulsion is an anionic slow-setting emulsified asphalt consisting of asphalt cement, conditioned water, and a patented emulsifier that is blended through a colloid mill. The water temporarily reduces the viscosity of the asphalt cement for ease of handling and application. After application, the water evaporates, leaving asphalt cement to perform its function. Bi-State Emulsions PEP asphalt emulsion conforms to the specifications of MODOT and IDOT.

Applications

Current common uses are in Prime Coat applications, Dust Suppression, Recycling or Base Stabilization. PEP is offered as a direct replacement to traditional Cutback Asphalts, used in the mentioned applications.

Typical Material Use

- Prime Coat
- Dust Suppression
- Recycling and Base Stabilization

Temperatures

- Storage: 55-140° F
- Spray Application: 70-150° F
  - Agitate or circulate gently while heating.
  - Apply only when ambient and pavement temperatures are 50° F and rising.
  - Do not apply with impending rain or on a wet surface.

Application

- **Prime Coat:** 0.20 to 0.30 gallons per square yard applied by calibrated distributor with correct size spray nozzles uniformly set at 30° for a triple-fan spray. Hand spraying shall be performed with caution to avoid over spraying.
  - Application rate varies with surface texture, and material.
- Avoid ponding of material. Allow up to 3-4 hours to cure.
- Do not apply when rain is forecasted within 4 hours after application.

Storage and Handling

Before being filled, tankers and distributors should be examined for possible contaminants. PEP is not compatible with cationic emulsions. All tankers and distributors shall be thoroughly cleaned and drained if cationic emulsion was previously present. Do not dilute or over agitate by mixing or pumping excessively. The product should not be heated or cooled outside the storage temperature limits. PEP storage over 30 days may result in product breaking and should be visually inspected for separation before use.

Packaging

PEP is available in bulk.

Health & Safety

Refer to Emulsion Safety Data Sheets (SDS) before use. Transport, use and store at the lowest temperature possible. Eliminate all potential ignition sources during application. Avoid breathing vapors. Avoid contact with skin. Always wear appropriate PPE including heat protection when used hot. DO NOT allow product or washings to enter storm water or sanitary sewer systems.

Protect the environment

Waste must be disposed of in accordance with local legislation.

Typical Physical Characteristics*

Description	Unit	Test Method	Specification	
			Minimum	Maximum
Test on emulsified asphalt:				
Viscosity, Saybolt Furol @ 77 °F	s	AASHTO T 59	20	100
Sieve Test	%	AASHTO T 59	--	0.10
Distillation:				
Residue	%	AASHTO T 59	57	--
Oil Distillate, VOE	%	AASHTO T59	--	4.0
Tests on residue from distillation:				
Sand Penetration	dmm	AASHTO T 49	(1)	
Note. 1. -The time of penetration shall be equal to or less than that of MC-30. The depth of penetration shall be equal to or greater than that of MC-30.				

*These characteristics are typical of current production. While future production will conform to these specifications, variations within these minimums and maximums may occur.

Bi-State Emulsions, LLC ♦ 3714 Big Bend Industrial Ct, Maplewood, MO 63143 ♦ Tel: (314) 645-1818 ♦ Fax: (314) 645-8898♦ www.missouripetroleum.com

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