

# TF Terra Fog Fog Sealant

## Description:

These specifications cover the furnishing and application of an emulsified polymer and water mixture as an aggregate loss preventative or surface seal.

The work described in each Item includes the furnishing of all materials, equipment, supplies, tools, the performance of all labor and services, and all incidentals necessary to complete the fog seal application in a neat, substantial and workman-like manner.

This work is a service contract and is subsidiary to the agency's pavement preservation program. The agency will be responsible for permits, traffic control and utility notification.

## Materials and Methods

### A. Specialty Terra Fog Seal Binder

1. Specialty fog seal materials must be low volatile content water based emulsions of polymers specifically designed for use as fog seals and must meet the requirements of Table 1.

**Table 1**  
**Fog Seal Material Properties<sup>1</sup>**

Property	Procedure	Min	Max
Viscosity, 77°F, Krebs unit	D 562	5	65
Sieve test, %	T 59	-	0.14
Storage stability, 1 day, %	T 59	-	2
Residue by evaporation, %	T 59	1	-

<sup>1</sup> For materials diluted either by the manufacturer or at the jobsite, the final diluted material must meet these requirements.

2. Materials that are prequalified under this specification will still be subject to a regular approval process, as described in Tex-545-C, "Asphalt Binder Quality Program."
3. Use a material specifically designed as a polymer fog seal as shown on the plans or as approved. Provide water in accordance with Article 204.2, "Materials." Mix the polymer with water as shown on the plan or as approved.
4. All materials for job site shall at all times be mobile and not stored in the road or walk area, unless agreed upon between Contractor and the agency.

## B. Equipment

1. Furnish a distributor that will apply the polymer fog seal material uniformly at the specified rate or as directed. When less quantity is used, a hand spray wand with a pump can be used.
2. Furnish a volumetric calibration and strap stick for the distributor tank in accordance with Tex-922-K, Part I. Calibrate the distributor within the previous 5 yr. of the date first used on the project. The Engineer may verify calibration accuracy in accordance with Tex-922-K, Part II.

## C. Work

1. Apply the mixture when the air temperature is 60°F and above, or above 50°F and rising. Measure the air temperature in the shade away from artificial heat. The Engineer will determine when weather conditions are suitable for application. Distribute material at the rate shown on the plans or as directed. Open the treated surface to traffic when cured or as directed.
2. Application: Polymer fog seal material should be mixed with clean water. The pavement to be fog sealed needs to have adequate surface friction and over application of polymer fog seal is not recommended. Polymer fog seal will seal minor cracks, up to 1/16". Cracks larger than 1/16" should be sealed with a suitable hot or cold pour crack sealant, prior to application of Terra Fog.
  - a. Water proofing: When using on asphalt mixtures such as asphaltic concrete pavement, limestone rock asphalt or cold mixes, polymer fog seal material should be applied at a rate of the diluted mixture of between 0.1-0.25 gallons per square yard. This will seal the water and air out of asphalt surfaces and provide a UV resistant surface. Care should be taken to avoid over-application as the texture of the existing pavement must be maintained for adequate skid resistance. Do not apply to a pavement surface already exhibiting flushing or bleeding or one that has poor skid resistance.
  - b. Aggregate retention – To retain aggregate on a chip seal, the following diluted application rates are recommended:
    1. Aggregate 1/8" to 1/4": 0.1 - 0.2 gal/sy
    2. Aggregate 1/4" to 3/8": 0.15 -0.25 gal/sy
    3. Aggregate >3/8": 0.2 – 0.3 gal/sy

It is important to flush tanks, pumps, spray bars and nozzles with water as necessary when the application is finished to ensure they are clean.

### **SSPFS.3 Measurements**

This Item will be measured by the Square Yard of the diluted polymer applied to the street surface.

### **SSPFS.4 Payment**

**This work is a service contract for maintenance and is subsidiary to the agency's pavement maintenance program. This work will be along streets identified by the Project Manager as having dislodged trap rock that can be effectively repaired by sealing with a polymer fog seal material. The specific locations will be designated by the project manager and reviewed with the service provider.**

The materials furnished and placed by distributor:

**Polymer fog seal material:** \_\_\_\_\_ **Square Yard**