

ITEM SPECIAL: NTSS-1HM TRACKLESS TACK COAT

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NTSS-1HM.01 Description. This work consists of preparing and treating a paved surface with a specialized anionic trackless asphalt emulsion. Used primarily for hot mix asphalt construction. All requirements of ODOT 407 Tack Coat specification in the CMS shall be met except as noted below.

NTSS-1HM Material. Conform to the following typical physical properties:

Parameter	Test Method	MIN.	MAX.
Saybolt Furol Viscosity, SFS @ 25°C	ASTM D88	15	100
Storage Stability, 24 hrs, %	ASTM D244	--	1
Storage Stability, 5 days, %	ASTM D244	--	5
Residue by Distillation, %	ASTM D244	50	--
Oil Distillate, %	ASTM D244	--	1
Sieve Test, %	ASTM D244	--	0.3
Test on Residue:			
Penetration, @ 25°C,	ASTM D5	--	20
Softening Point Range Deg C	ASTM D36	65	--
Solubility,%	ASTM D2042	97.5	--
Original Binder DSR@82°C			
G*/SIN δ,10 rad/sec	AASHTO T111	1	--

Note: Product should not contain filler such as clay, etc

NTSS-1HM.03 Equipment. Provide adequate cleaning equipment and distributor.

Use distributors designed, equipped, maintained, and operated to apply asphalt material at the specified rate per square yard (square meter) with uniform pressure over the required width of application. Ensure that the distributor includes a tachometer, pressure gauges, accurate volume measuring devices, or a calibrated tank. Mount an accurate thermometer with a range covering the specified application temperature for asphalt material at approximately center height of the tank with the stem extending into the asphalt material. Ensure that the distributor has a full-circulating system with a spray bar that is adjustable laterally and vertically. Ensure that the spray bar will maintain a constant height above the pavement under variable load conditions. Supply each distributor with suitable charts showing truck and pump speeds and other pertinent application data necessary to obtain the required results. **See manufacture representative for correct distributor settings.**

NTSS-1HM.04 **Weather Limitations.** Do not apply the asphalt material if the surface temperature is below the minimum placement temperature for the pavement course to be placed, as specified in ODOT 401.06 Specification. **Note: Subject to damage if frozen.**

NTSS-1HM.05 **Preparation of Surface.** Ensure that the surface is thoroughly clean and dry when the asphalt material is applied. Remove material cleaned from the surface and dispose of it as the Engineer directs.

NTSS-1HM.06 **Application of Asphalt Material.** Uniformly apply the asphalt material with a distributor. Surface to be clean and dry.

Note: NTSS-1HM not compatible with Cationic emulsions (CRS, CQS, CMS, CSS etc...)

All equipment should be thoroughly if cationic emulsion was previously present. If product is to be stored for an extended period of time the material should be agitated or gently circulated prior to use.

Nozzle spray pattern should be identical to one another along the distributor spray bar. The angle of the nozzle should a 15 to 30 degree angle to the spray bar axis to maximize overlap.

NTSS-1HM should be applied at a rate of 0.04 to 0.08 gallons per square yard. Recommended application temperature is 160°F to 180° F. Do not exceed 180°F.

For irregular areas such as driveways and intersections, apply the asphalt material using a method the Engineer approves.

Before placing a surface course onto an intermediate course, apply a tack coat on the intermediate course.

Apply the tack coat in a manner that offers the least inconvenience to traffic and that allows one-way traffic without pickup or tracking. Only apply the tack coat to areas that will be covered by a pavement course during the same day.

The Engineer and Manufactures Representative will approve the quantity, rate of application, temperature, distributor settings and areas to be treated before application of the tack coat. Please contact the manufacture representative for distributor settings and spray nozzles. The engineer will determine the actual application in gallons per square yard (Liters per square meter) by a check on the project. The application is considered satisfactory when the actual rate is within ± 10 percent of the required rate and the material is applied uniformly with no visible evidence of streaking or ridging.

NTSS-1HM.07 **Method of Measurement.** The Department will measure Tack Coat and Tack Coat for Intermediate Course by the number of gallons (liters) of undiluted asphalt material applied for each according to Item 109.

NTSS-1HM.08 **Basis of Payment.**

The Department will pay for accepted quantities at the contract prices as follows:

Item	Unit	Description
Special NTSS-1HM	Gallon (Liter)	Tack Coat
Special NTSS-1HM	Gallon (Liter)	Tack Coat for Intermediate Course