



Storage, Handling, and Application Guidelines for Trackless Tack

Blacklidge Emulsions' Trackless Tack (NTSS-1HM) is the most state-of-the-art anionic asphalt emulsion available for high performing, trackless tack coat applications. NTSS-1HM is produced using advanced technology and utilizes a high-modulus (HM) asphalt. The product is formulated for a fast cure, leaving a non-tracking tack coat minutes after application. Upon placement of the new hot mix asphalt, heat from the new layer will liquefy the residual high-modulus asphalt tack, and an excellent bond will be formed between the existing and new hot mix courses. For proper performance, it is imperative that the following storage, handling, and application guidelines are carefully followed.

LIMITATIONS

Proper storage, handling, and application guidelines must be followed carefully for best results. As with any emulsion, do not allow the material to freeze or boil because of aggressive heating. Freezing or boiling of Trackless Tack will break the emulsion. **TRACKLESS TACK IS NOT COMPATIBLE WITH CATIONIC EMULSIONS (CRS, CMS, CSS, CQS, etc.).** All equipment should be thoroughly cleaned if cationic emulsion was previously present. It is highly recommended for the product to be applied when hot (160°F to 180°F). If the product is to be stored for an extended period of time, the material should be agitated and/or gently circulated prior to use. Please contact your Blacklidge Emulsions' representative prior to first use for detailed storage and handling procedures.

STORAGE AND HANDLING GUIDELINES

NTSS-1HM is an anionic asphalt emulsion, and it should only be placed in clean storage tanks. Contamination with other products could reduce performance and/or trackless behavior.

Storage in Tanker Trailers:

The storage of NTSS-1HM in a tanker trailer for over one week is not recommended. However, when the product must be stored for more than a week, it should be circulated **twice per day for a minimum of 20 minutes** to minimize settlement and skin formation.

Storage in Vertical Tanks:

The use of vertical storage tanks is recommended to minimize the surface area of the emulsion that is exposed to air. Prior to loading, ensure that the tank is clean and free of any material. Continuous agitation is recommended to minimize settlement and skin formation. Agitation is sufficient when the material can be seen to "roll" at the top. Tanks should be filled from the bottom of the tank. **Agitation in tank shall be at maximum of 11 rounds per minute.** It is recommended to store NTSS-1HM between 160 and 180 °F.

Guidelines for Storage Tanks:

NTSS-1HM weighs about 8.5 lbs per gallon (US). The tank foundations must be designed for the maximum volume plus the tank shell and attached equipment. Vertical tanks are best set on a concrete pad. This pad is a structural member and should be designed by a competent civil engineer. Foundations also must be properly designed.

Filling Distributor:

NTSS-1HM is an anionic product, and contamination with other products may reduce performance and/or trackless behavior. Completely clean the distributor, hoses, screens, spraybar, and spray nozzles before loading NTSS-1HM. Prior to loading from storage tank or tanker trailer, remove the 3-inch cone-shaped strainer on the suction side of the distributor pump, if present.

Ensure that the emulsion completely covers heat tubes or heating elements. **Exposure of the distributor's heating elements to air may pose an explosion risk.**

Prior to applying the product, heat and circulate the material. Note: the distributor's temperature probe must be submerged in the product to be accurate. If the probe is not submerged, the product's temperature must be determined by alternative means.

The heating & circulating process should be as follows:

1. Slowly heat the emulsion to 140 °F.
2. Begin circulating the material in the distributor tank only (100 to 150 gallons per minute) and continue slowly increasing heat to between 160 °F to 180 °F.
3. Once the desired temperature is reached, begin circulating in the distributor's spraybar.
4. Maintain circulation through the spraybar for a minimum of 30 minutes prior to application.

During periods of cooler atmospheric temperatures, it may be necessary to manually heat the distributor pump to allow for easier circulation. For easiest operation during winter months, it is recommended that the distributor be filled during the warmest part of the day.

NTSS-1HM is ready to spray once it is confirmed that the product is homogenous and the temperature of the material is between 160 °F to 180 °F in the tank and spraybar line.

During periods of intermittent application; slow, continuous circulation through the spraybar is recommended until the paving operations are stopped for the day. At the completion of application or if the product in the distributor tank is not planned to be used for an extended period of time, the emulsion should be sucked back out of the spraybar. Once all of the emulsion is out of the spraybar, a small amount of diesel (**no more than ½ gallon**) should be added to the pump on the distributor truck. This will readily help start the pump the next time it is used.

PLEASE NOTE: Adding too much diesel can soften the asphalt causing breakage and possible loss of trackless characteristics. Before application begins again, follow the heating and circulation processes previously outlined.

It is highly recommended that reheating of the emulsion be minimized as much as possible. This avoids over dilution with diesel and degradation of the emulsion which can reduce performance and trackless behavior.

Re-filling the Distributor:

It is recommended to completely clean out any solid residue or settlement prior to loading new material. After the distributor is clean, follow the loading procedures above.

APPLICATION

Conventional emulsion distributors are suitable for NTSS-1HM application. The pavement surface should be cleaned and dry prior to application. The application rate will be dependent on the condition of the surface, pavement layer to be applied, and local specification requirements, but the general range is often between 0.04 to 0.08 gallons per square yard. Experience has shown that NTSS-1HM can be used at any pavement temperature where conventional tack coats can be applied. For best results, please follow local agency specifications and requirements. The desired application temperature of NTSS-1HM is 160 °F to 180 °F for a normal sunny day. During periods of cooler temperatures or shady conditions, it is recommended to apply NTSS-1HM in the upper end of this range (170 °F to 180 °F), but in no situation should the temperature be allowed to exceed 180 °F. It is highly recommended that NTSS-1HM be heated to the application temperature in a gentle manner to avoid any localized boiling of the emulsion. **Failure to follow the heating recommendations and/or overheating the product, will lead to damage to the NTSS-1HM product and its performance.**

PREFERRED DISTRIBUTOR SETTINGS

The following recommendations are based on Blacklidge Emulsions' experience on the best performance and most consistent coverage for applications of Trackless Tack.

Use Etnyre spraybar nozzle S36-4 V Slot (part #3351008), or equivalent, and raise spraybar to highest level on distributor. The spraybar should be configured such that the nozzles at each edge of the bar are active and parallel to the direction of application. All of the other inside nozzles to be used should be perpendicular to the direction of application. After the nozzles on the each edge of the spraybar, the next nozzle inside should be active; skip two, and the third nozzle should be active. Continue with this configuration, essentially using one nozzle per foot perpendicular to the direction of application, for best coverage of the tack coat.

Please contact your Blacklidge Emulsions' representative for more information if necessary.

CAUTION

For industrial use only. Keep out of reach of children. Refer to MSDS for further information.
THIS PRODUCT IS NOT SUBJECT TO CONTROLLED PRODUCT REGULATIONS.

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