

# Reduced Tracking and High Bond Strength



DuraTac is an asphalt emulsion additive that significantly reduces tracking, accelerates drying, and enhances bond strength. DuraTac can be added to cationic and anionic emulsions. It instantly turns an emulsion into a less-tracking tack coat and eliminates the need for hard pen emulsions and associated problems of nozzle clogging, storage stability, and excessive heating.

## HOW IT WORKS

DuraTac is a silane-based nano-polymer that has a non-stick nature. During the emulsion drying process, the polymer anchors to the surface to improve bond strength. The nano-polymer also has properties which limits adhesion to tires.

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## KEY BENEFITS

DuraTac eliminates the need for utilizing asphalt emulsions that are comprised of hard pen asphalt for less tracking tack. Contractors and emulsion producers can continue utilizing their regular tack coat emulsions, and simply add DuraTac for on demand less tracking performance. DT substantially reduces the tracking tendency of emulsion with a <100 dmm.

DuraTac modified emulsions do not have the traditional limitations of hard pen emulsions as shown in the table below:

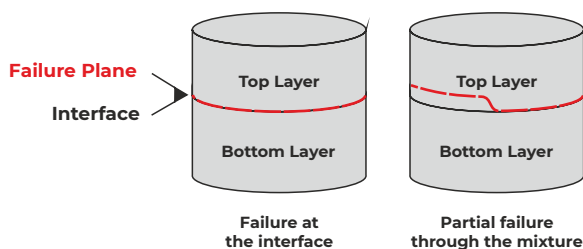
ITEM	DURATAC MODIFIED EMULSION	HARD PENN EMULSION
Emulsion Type	Anionic or Cationic	Primarily Anionic
Heating Requirements	140F - 160F	170F - 180F
Distributor Cleanout	Easy and Helps	Difficult
Storage Facility	No Extra Requirements or Tanks	Extra Tanks Required
Ease of Manufacturing	Easy	Difficult
Nozzle Clogging	None, Helps Clean	High
Application Rate	.04 - .08 gals / sy	.05 - .15 gals / sy
Paving Grade Emulsion	<1 00 dmm	< 5-40 dmm

## BLENDING INSTRUCTIONS

DuraTac can be added to the emulsion at a rate of 2-2.5% by volume. It can be added on site into the distributor truck or at the emulsion terminal. It is non-hazardous to handle and can be uniformly mixed with the emulsion by simple re-circulation. DuraTac has a low viscosity without needing special requirements or equipment.

## ENHANCED BOND STRENGTH

DuraTac improves interlayer shear strength in accordance with AASHTO TP 114 and successfully shifts the plane of failure from the tack coat to the mix. This is illustrated below:



INTERLAYER SHEAR STRENGTH (ISS) TEST RESULTS BY VOLUME - AASHTO TP 114

