

The Effects of Polymer Type and Addition Process on the Properties of Asphalt Emulsion Slurries

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With the increase in the demand for pavement preservation treatments comes an increase in the use of emulsified asphalts. Like regular asphalt, adding polymers to emulsions has led to better field performance with polymer modified slurry treatments when compared to regular slurry treatments. A large number of asphalt compatible polymers available in the field has allowed a wide variety of polymer modified emulsions to be produced, along with the ability to add polymers to the emulsion at different stages of the manufacturing. This study examines the properties of emulsions containing two different types of polymers and three different stages of addition. Both the properties of the emulsion as well as the properties of the residue will be studied, along with wet track abrasion tests on trial slurry mixes using a standard type 2 aggregate gradation. This study aims at identifying the optimum dosage, type and addition stage of polymers for modified asphalt slurry treatments

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