



Cationic High Float

A New Innovation For A Well Established Process

The industry continues to develop and improve asphalt surface treatments. The recent introduction of Cationic High Float emulsions into the market provides your agency with the most advanced chip seal system option being used today. The “High Float” characteristic of the emulsion provides high early strength gain to the surface treatment by providing excellent “aggregate to binder” adhesion. This results in a more durable and longer lasting surface treatment. Missouri Petroleum continues to offer new materials and processes to improve your road maintenance arsenal.

How does it work?

Chemical additives establish a “gel structure” as the cationic high float system cures. This allows the treatment to de-water faster which in turn relates to more rapid initial strength gain of the asphalt. The result is a more rapid aggregate to asphalt bond.

When should I use it?

You should use cationic high float emulsion when you are seeking superior performance in a chip seal system. This is especially important when smaller aggregate is used. In a successful project the chip seal aggregate is embedded by about 70% into the asphalt surface. A smaller aggregate will have less surface contact with the asphalt binder. It is important that optimum bond strength be shared between the rock and the asphalt.

Obviously, the compatibility of the aggregate and asphalt binder used in the system also plays a key role in the success of your project.

What special considerations must be made when using cationic high float products?

None. You can apply the material in the same way you apply other spray grade emulsions.

What about cost?

Cationic High Float Emulsion costs are comparable to traditional Cationic Emulsions.



Traditional Polymer Modified System



Cationic High Float Polymer System



A two year old 1/4" trap rock CHFRS2P chip seal system in Webster Groves is performing well.



A 3/8" trap rock CHFRS2P chip seal placed in 2012 in Lincoln County