

Road Science's Innovative Tack Coat Technology Paves Roads of the Future

ArrMuls® *chemistry enables 75% faster traffic return while eliminating tack coat tracking for stronger, safer roads.*

Tulsa, Okla. (PRWEB) June 22, 2016 -- Road Science, a division of ArrMaz, introduces ArrMuls Tack Technology, its latest innovation in asphalt emulsifier chemistry focused on eliminating tack coat tracking for faster traffic return to the roadway, while improving pavement layer bonding for better, longer-lasting roads. ArrMuls Tack Technology is a two-component chemical kit that enables emulsion producers to manufacture anionic non-tracking tack coat using strain-tolerant, non-brittle paving-grade asphalts. In contrast to conventional tack coats, ArrMuls Tack Technology is formulated to prevent the tack coat from being picked up and tracked away by vehicle tires, resulting in significantly improved pavement structure and strength.

A tack coat is an asphalt emulsion, which when sprayed onto pavement, functions as a glue to hold existing and new pavement layers together. It enhances the bonding of individual pavement layers so that they function as a single, unified pavement for improved strength and durability. When properly bonded, the resulting pavement structure uniformly distributes traffic load stress. Without proper bonding, each pavement layer works independently, failing to distribute stress evenly, leading to cracking, rutting, slippage and other distresses that destroy road quality.

In order for a tack coat to bond effectively, it must be allowed to dry before trucks and paving vehicles drive onto it to place a new pavement layer. If vehicles drive onto the tack coat too soon, it can be picked up by tires, tracked away and deposited on nearby roads. This can lead to reduced friction of the road, impacting driver safety. The longer it takes for the tack coat to dry, the greater the time needed to pave the road and return traffic, and the more likely the tack coat gets tracked away compromising pavement strength.

ArrMuls Tack Technology solves this problem by decreasing tack coat drying time by 75% from what is typically 60 minutes or more, to less than 15 minutes. By reducing paving downtime and returning traffic quicker, paving crews save several hours per week which can translate into hundreds of thousands in savings per paving crew per year. By preventing tack coat from being tracked away, ArrMuls Tack Technology not only extends pavement life, but also eliminates costs to remove tracked tack coat and replace traffic paint, while eradicating the safety liability of reduced friction roads.

Most conventional non-tracking tack coats are made of hard, brittle asphalt that is susceptible to cracking and can even promote cracking in pavement layers. ArrMuls Tack Technology is better for pavements because it uses softer paving-grade asphalts that are flexible, strain-tolerant and much less susceptible to cracking. It can also be formulated to meet typical specifications including AASHTO M-140 and ASTM D-977 for slow-setting (SS-1h) emulsion.

"Emulsion manufacturers find ArrMuls Tack Technology easier and more convenient to produce since it uses paving-grade asphalts they can source easily and emulsify without difficulty. Paving contractors prefer it because it becomes non-tracking in a matter of minutes after being sprayed, and remains stable when stored for long durations in tank trucks and storage tanks," said Ivann Harnish, Business Manager, Emulsifiers at Road Science.

ArrMuls Tack Technology chemistry is one more way Road Science is helping the asphalt paving industry



improve road quality and safety worldwide.

About ArrMaz & Road Science

ArrMaz is a global leader in the production of specialty chemicals for the asphalt, mining, fertilizer, phosphate, and oil and gas industries worldwide. Since 1967, ArrMaz has manufactured chemical process aids and additives formulated to optimize process performance and product quality. Road Science, a division of ArrMaz, is a technology leader in the supply of asphalt emulsifiers and additives to the North American asphalt paving market. Much more than "off-the-shelf" products, their complete system solutions include technical services such as job support, mix design, formulation, crew training and specification development to meet the unique needs of the asphalt paving industry. For more information about our company and products, please visit us online at arrmaz.com and roadscience.net.



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