





STAR RUST-ARREST

Acrylic latex specialty coating

What is rust?

Rust is Iron Oxide (s) and is formed as Iron oxidizes in the presence of air and moisture.

What are the brown spots and streaks in asphalt & concrete pavements?

They are rust spots and streaks. They develop as the asphalt ages and oxidizes.

Iron in asphalt and concrete? How does that happen?

Iron is introduced in the asphalt or concrete mix through the aggregate. The aggregate may contain Pyrites or iron deposits. With age, these types of iron contaminants in the aggregate oxidize and convert into oxides of iron (rust).



Why are they even allowed in the aggregate? Can they be removed?

The iron ores, pyrites and other ores and minerals are naturally occurring parts of the aggregate. Departments Of Transportation (DOTs) allow a certain degree of rust spots (per square yard) in asphalt and concrete pavements. Theoretically they can be removed but not economically.

What happens to rust spots with age?

With aging, the iron contaminants continue to oxidize and turn brown due to the formation of iron oxide. They also expand in volume because iron oxides occupy more volume than their original iron compounds. This results in eruptions through the surface of the asphalt pavement.

What if they are left alone and nothing is done?

The erupted spots will be the *sites of failure in the pavement*, through which water and other damaging elements will enter and damage the pavement.



How about sealcoatings? Don't sealcoatings stop rust spotting?

No.! Sealcoatings will not stop rust from progressing.

On a freshly sealcoated lot you may get the impression that the rust spots are under control because they are temporarily covered. However, the iron in the aggregate continues to oxidize and expand under the sealcoating. Within a few days the rust spots



begin to appear as silvery streaks on the sealcoated surface. As more time passes, these streaks turn brown and finally the rust spots erupt through the sealcoating.

Yes that is correct. I have seen it come through traffic lines, handicap marking, etc.

How to stop rusting and protect the pavement?

The source of rusting i.e. the iron in the aggregate has to be converted into another compound that will not oxidize into iron oxides (rust).

What do you recommend?

STAR RUST-ARREST

STAR RUST-ARREST is a specialty product especially developed to stop rusting on pavements. The product is water based, with a paint type consistency.

Some highlights are;

- Highly efficient. Will stop rusting completely for years.
- Based on rubber latex, specialty chemicals and surfactants
- Easy to use with any conventional application equipment, spray, brush, roller, etc.

- Highly cost effective. Application rate is approx. 150 sq. ft./gallon
- Dries to satin black color.

How to use STAR RUST-ARREST?

Use as primer coat using **STAR RUST-ARREST** at full strength. Apply with a brush or roller for spot priming For extensively rust spotted areas use a sprayer.

After using STAR RUST-ARREST, does the pavement have to sealcoated?

It may be sealcoated for a uniform textured appearance but sealcoating is not essential.

Can STAR RUST-ARREST be used on sealcoated parking lots that are rusting? Yes. It will be very effective and stop rust from ever appearing.

