



Surfix[®] 70

A high performance polymer modified bituminous emulsion

Surfix[®] 70 emulsion is a high solids content polymer modified emulsion formulation, designed for exceptional performance in sealing applications under a variety of conditions.

Surfix[®] 70 emulsion provides all the safety and environmental benefits normally associated with the use and handling of bituminous emulsions, whilst providing far superior performance characteristics.

What is Surfix[®] 70 emulsion?

Emulsion seals are used to provide a new wearing surface and significantly extend the life of an existing pavement.

Developed in response to the limitations of using cutback bitumen for sealing during undesirable weather conditions, Surfix[®] 70 emulsion increases the seasonal window where bitumen seal applications can be used. Cutback bitumen involves the use of solvents to decrease its viscosity. Surfix[®] 70 emulsion eliminates the need for this, greatly reducing overall energy consumption and the emission of carbon dioxide and volatile organic compounds that are associated with the use of cutback bitumen.

Surfix[®] 70 emulsion was formulated to reduce the risk of both crack reflection in the pavement, as well as aggregate stripping from the surface. It also reduces the likelihood of water penetrating through the underlying pavement structure, acting as an additional waterproofing layer.



Surfix[®] 70 is a registered trademark product of Fulton Hogan.

What sets Surfix® 70 emulsion apart?

Surfix® 70 emulsion is a 70% binder content polymer modified bituminous emulsion seal, developed and tested by Fulton Hogan, against a range of industry leading alternatives. When compared to other standard sealing emulsions such as CRS 170, Surfix® 70 emulsion exhibits:

- Much improved binder/aggregate adhesion, particularly in cold weather
- Excellent hot weather performance
- High resistance to flushing under increased traffic loading
- High resistance to low temperature cracking
- Excellent compatibility over a wide range of aggregates
- Reduced run off at elevated application rate



Surfix® 70 emulsion exhibits excellent stone adhesion and torsional recovery.

Recommended applications?

All Surfix® 70 emulsions are able to be sprayed under cool conditions, in temperature ranges that would otherwise prohibit the use of hot bitumen sealing. This benefit alone allows for an extension to the traditional sealing season, giving asset managers greater flexibility in their work programs. Surfix® 70 emulsions are suitable for use in the following applications:

- Sealing of heavily trafficked areas, where extra binder toughness is required to resist stone displacement
- Two coat gravel seals for new surfaces
- Cool weather sealing where the performance of hot bitumen sealing is compromised

How does Surfix® 70 emulsion work?

The addition of polymer modification as part of the Surfix® 70 emulsion design enhances its properties to provide excellent performance under tough conditions. These polymers increase the adhesion between the seal and aggregate surface, by increasing elasticity and firmness.

Surfix® 70 emulsion is an emulsion created by the dispersion of bitumen in water, which reduces the need for cutter to decrease viscosity. An emulsifying agent is used to aid dispersion, which allows water to be displaced from the surface during destabilisation creating a seal. By doing this it enables Surfix® 70 emulsion to be utilised in a wider range of conditions, especially cooler temperatures. It also creates additional environmental benefits resulting from the reduction of volatile hydrocarbons (potential pollutants).



Application of Surfix® 70 emulsion to an existing pavement.

How to apply Surfix® 70 emulsion?

Surfix® 70 emulsion should be applied at a temperature in the range of 75-90°C using conventional bitumen emulsion spray sealing equipment to achieve satisfactory emulsion distribution and coverage.

Size of Aggregate	Rate of Spread of Aggregate	Application Rate for Emulsion (hot)
7mm	140 – 150m ² /m ³	14 – 18 l/m ²
10mm	125 – 145m ² /m ³	17 – 21 l/m ²

Class leading Surfix® emulsions are available from all Fulton Hogan emulsions plants across Australia. Our advanced processes ensure consistency, quality and performance for your next project.

Note: Surfix® 70 emulsions must not be mixed with anionic emulsions such as ARS or ASS types due to chemical incompatibility. Care is also required in returning reheated product to existing storage.

For further information or you can visit www.fultonhogan.com or contact your nearest Fulton Hogan office:

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