EmulPrime® is a specially formulated bitumen emulsion primer, designed to penetrate granular pavement materials under cold and damp weather conditions.

The function of a road primer is to bind the surface, reduce permeability and provide a sound interface for subsequent surfacing such as a chip seal or asphalt overlay.

Why use EmulPrime?

Conventional primers tend to be slow curing and are prone to washout if rainfall occurs soon after priming has been completed. This is particularly the case under cool and damp conditions.

EmulPrime is specifically designed to enable priming of pavements under these conditions with minimal risk of washout. Satisfactory results are achieved with moisture levels below 3%.

However, pavement moisture levels up to 4% have been effectively primed with EmulPrime depending on the tightness of the pavement. The use of EmulPrime promotes conservation of non-renewable petroleum product, as well as the reduction of hydrocarbon emissions.

Unlike conventional AMC-00 primer, EmulPrime is predominantly water based and is specially formulated to improve resistance to washout. This characteristic was confirmed by laboratory experiment as illustrated below and is observed on work sites.
How about performance?

A characteristic of traditionally primed pavements is that the cutback bitumen i.e. bitumen that has been heavily diluted by hydrocarbon solvents, often pools and sits on the surface of the pavement in depressions or on very tightly bound areas.

Under cool conditions, the curing process can often take well in excess of 48 hours for conventional primes. However, EmulPrime is able to cure in less than 24 hours, reducing delays to paving operations and leading to savings in the final construction cost.

EmulPrime is specifically formulated to reduce the level of hydrocarbon solvent emitted per unit area treated without compromising pavement penetration and strength.

A laboratory comparison of the bond strengths of EmulPrime and AMC-00 when used between a premium chip seal binder and compacted road base is illustrated in the previous graph. More details are available on request.

How to apply EmulPrime?

EmulPrime is supplied ready to use and may be applied using conventional spraying equipment. It is applied cold and penetrates quickly, minimising the presence of oily surface liquids that are prone to washout by rain.