



# Enviromax Seal



Helps to resolve these problems:



CRACKING



WATER PROOFING



CHIP LOSS

## Enviromax Seal Polymer Modified Emulsion for use as a superior chipsealing binder.

Enviromax Seal is a 74% binder content polymer modified chipsealing emulsion for use in all chipsealing applications where an increased level of performance is required.

Enviromax Seal uses 80/100 grade bitumen as the base binder.

The presence of polymer greatly enhances the performance of the binder making it suitable in most chipsealing techniques.

### Where to use RS1 Enviromax Seal Polymer Modified Emulsion:

For use as a bituminous binder for most chipsealing techniques.

For use over cracked pavements where some degree of elasticity is required.

For use on sites where there is high stress, such as in sharp corners or braking zones.

Enviromax Seal is delivered at an application temperature of 75°C in ready to use form.

Enviromax Seal provides the safest and most successful method by which to deliver chipsealing polymer

modified bitumen, with a greatly reduced risk of hot bitumen burns or risk of ignition.

## Benefits:

Benefits of Enviromax Seal:

Enviromax Seal offers the best way of delivering a polymer modified binder to the road surface with the following improved features:

Safer application temperature compared with hot bitumen delivered product

Lower fuming and emissions to atmosphere

Excellent chip adhesion

An ability to extend the season during which polymer modified binders can be successfully applied.

Enviromax Seal provides the most practical and safe method by which to apply a polymer modified binder in a chipseal application.

Enviromax Seal can be used for all sealing techniques including; two coat seals, rack-in seals, single coat seals, sandwich seals and first coat seals.



## Specification

Typical properties of Enviromax Seal Polymer Modified Emulsion.

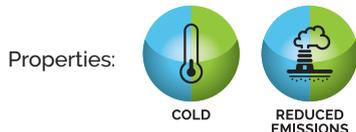
Property	Method	Specification
Binder Residue (%)	In-house method	>73%
Viscosity @ 70°C (cps)	In-house method	1500 - 3000
Softening Point (°C) of polymer modified binder	ASTM D36-2006	40 - 50°C

## Health & Safety

Enviromax Seal is handled at elevated temperatures (~80°C) and all precautions should be taken to prevent burns. Full personal protective equipment must be used at all times when pumping, transferring or sampling PME. Burns should be treated in the same way as hot bitumen burns. The Roding NZ Bitumen Burns card should be consulted and the instructions followed. e.g. cooling water should be immediately applied but no attempt should be made to remove bitumen from the burn area.

Any contact on the skin (other than burns) should be washed off immediately with appropriate hand cleaners, do not use solvents.

A safety data sheet for Enviromax Seal is freely available on the Road Science website and must be read and understood prior to handling the Enviromax Seal Polymer Modified Emulsion binder.



## Handling & Mixing Information

### Enviromax Seal Polymer Modified Emulsion

Maximum safe handling temperature	90°C
<i>Enviromax Seal Polymer Modified Emulsion should be circulated for at least 10 min prior to commencing spraying.</i>	
Normal Spray Temperature	70°C - 90°C
Normal Pumping Bitumen Emulsion Temperature	>60°C

## Storage Information

### Enviromax Seal Polymer Modified Emulsion

Short Term Storage Temperature (2 days)	75°C
Medium Term Storage Temperature (up to 5 days)	20 - 50°C
Long term storage temperature (beyond 5 days)	20 - 40°C

### Critical: Long Term Storage

If there is a need to postpone spraying beyond 5 days, storage temperatures should be dropped to <40°C.

Gentle stirring /circulation is required to prevent long term settling of the bitumen phase.

Never allow the Enviromax Seal Polymer Modified Emulsion to freeze, as the emulsion will break.

### Critical: Rate of heating

Reheating needs to be undertaken slowly with the rate of heating not exceeding 10°C per hour.

Gentle circulation is required during heating.

Never heat beyond 90°C.

## Sampling

Samples should be taken following transfer from storage or transport.

PPE as defined in the Material Safety Data Sheet should be worn when sampling Enviromax Seal including face shield as the product is transferred at slightly elevated temperatures and splashes are always a risk.

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