



# Resistamax Bind



Helps to resolve these problems:



RUTTING



RAVELLING

Resistamax Bind Polymer Modified Binder is used in the manufacture of extreme shear resistant asphalt, as is experienced on racetracks.

Resistamax Bind is a highly modified polymer-based binder used in the manufacture of extreme shear resistant asphalt. This binder when used in conventional asphalt mixes improves the shear resistance of the mix to levels well beyond that achievable with conventional bitumen based binders. This resistance to shearing force is particularly applicable to asphalt which is used as a wearing course on motor racetracks.

## Where to use Resistamax Bind:

Resistamax Bind is recommended for use in asphalt mixes where the base over which the asphalt will be laid has very low deflections (less than 1.0 mm). This requirement for low deflections is related to Resistamax Bind not having fatigue performance beyond that normally achieved with conventional bitumen based asphalt.

Resistamax Bind is ideal for use in asphalt mixes where the asphalt must withstand extreme shearing forces without rutting or shoving. Examples include motor sport racetracks, Go-Kart tracks & extreme braking or cornering situations.

## Benefits:

Resistamax Bind offers the benefit of a polymer modified binder with improved features as follows:

Exceptional shear resistance

Easy workability

Greatly improved performance and life over all conventional bitumen based binders with regard to shoving resistance.

The formulation of the Resistamax Bind binder has balanced superior long term performance properties with enhanced constructability. The Resistamax Bind binder, though mixed at slightly elevated temperatures, provides a mix which is easy to lay and compact.

## Habitat



Port



Airport



Industrial

## Specification

Typical properties of Resistamax Bind

Property	Method	Specification
Softening Point	ASTM D39	>80°C
Torsional Recovery	AGPT/T154	>10%
Viscosity @ 165°C, 20rpm	AGPT/T132	100 – 300 MPas

## Health & Safety

Resistamax Bind binder is handled at elevated temperatures and all precautions should be taken, as for handling hot bitumen. Please refer to the Roading New Zealand "The Bitumen Safety Book" for advice on how to handle hot bitumen binders and to understand the risks involved in handling these types of materials. Full personal protective equipment must be used at all times when pumping, transferring or sampling of Resistamax Bind.

A safety data sheet for Resistamax Bind is freely available on the Road Science website and must be read and understood prior to handling the Resistamax Bind binder.

Properties:



## Handling & Mixing Information

Dense Asphalt Mixes	
Maximum safe handling temperature for Resistamax Bind binder:	190°C
<i>The Resistamax Bind binder should be circulated for at least 2 hours prior to commencing mixing.</i>	
Mixing Binder Temperature	150°C – 160°C
Pumping Binder Temperature	160°C – 170°C

## Storage Information

### Resistamax Bind

Medium Term Storage Temperature (up to 5 days)	150 - 160°C
Long term storage temperature (beyond 5 days)	<150°C

### Critical: Long storage

If there is a need to postpone manufacture beyond 5 days, the storage temperatures of the Resistamax Bind should be dropped immediately to <150°C.

If there is considerable delay; it maybe economic to drop the product temperature to ambient and reheat when the binder is about to be used.

### Critical: Rate of heating

The reheating of Resistamax Bind, especially from cold, needs to be undertaken slowly with the rate of heating not exceeding 10°C per hour.

Pulsed heating cycles are preferred when using burner tubes.

## Sampling

Samples should be taken following transfer from storage or transport.

Full PPE should be worn including face shield as the product is transferred at elevated temperatures and poses a major burns risk. It is important to ensure that the sample is representative and that any residual conventional bitumen is flushed out of the sample cock prior to collecting the Resistamax Bind sample.

Testing should only be carried out by an IANZ registered laboratory that is experienced in handling and testing polymer modified binders.

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