



USED FOR



Waterproofing



Rutting



Dust Reduction



Pot Holes



Cracking

ENVIRONMENTS



Industrial



Rural



Residential



Motorway



Strengthen pavements for long-term performance.

EnviroBase is a stabilising bitumen emulsion designed to waterproof, strengthen, and extend the life of granular pavements.

EnviroBase can be used alone or with other stabilising agents and ensures the dry strength properties of the pavement are retained all year round.

Ideal for area-wide construction, unsealed roads and patch repairs, EnviroBase is a versatile product which enhances pavement resilience by preventing potholes and rutting, reducing dust, and improving waterproofing.

Where to use EnviroBase

- Area wide granular pavement rehabilitation
- Alternative to foam bitumen stabilisation
- Stabilised pavement patch repair
- Unsealed road stabilisation and dust reduction

Benefits

- Enhanced wet strength of granular material
- Dust reduction
- Year-round usability
- Crack prevention
- Pothole prevention
- Early patch failure prevention

Specification

Typical properties of EnviroBase

Property	Method	Specification
Binder content (%)	ITM 11	60 - 63
pH	ITM 08	2.0 - 4.0
Viscosity @ 25°C (mPa.s)	ASTM D4402	20-100

Properties



Handling

For safe handling of bituminous materials, please refer to the [Best practice guideline: Safe Handling of bituminous materials used for roading \(BPG01\)](#)

EnviroBase is typically handled and applied at ambient temperatures.

EnviroBase	
Normal handling temperature	15 - 90°C
Maximum safe handling temperature	90°C
Normal spray temperature	Ambient (15°C min)
Normal pumping temperature	15 - 90°C
Mixing binder temperature	15 - 90°C

Circulation

Gentle stirring/circulation of the emulsion is required to prevent long term settling of the bitumen phase. Never allow EnviroBase to drop below 15°C as this can cause the emulsion to break.

Storage

EnviroBase	
Short term storage temperature (up to 2 days)	15°C - 70°C
Medium term storage temperature (3 to 5 days)	15°C - 70°C
Long term storage temperature (beyond 5 days)	15°C - 70°C
Critical: Long term storage	15°C - 70°C

Treatment Selection + Mix Design

If you're unsure which treatment solution is best suited for your project — considering factors such as traffic volumes and asset management — consult a member of the Road Science Product Development Team. They can assist in determining the appropriate treatment selection and guide you through the mix design process.

Application

EnviroBase is designed to be added during the stabilisation process in accordance with the NZTA [TNZ B/5: 2008](#): Specification for in-situ stabilisation of modified pavement layers

Equipment

EnviroBase can be applied using most standard stabilisation equipment.

Storage units used for holding EnviroBase must be clean from contamination. Rust or other contaminants will cause the emulsion to break and form bitumen lumps.

Flush the spray bar, hand lance and pump thoroughly at the end of the day to ensure equipment doesn't have any blockages. For best results, a two step flushing process is recommended;

- First flush with water to remove any uncured emulsion
- Second flush with diesel or kerosene to remove any cured binder

Sampling

For managing bitumen quality, please refer to the [Waka Kotahi NZ Transport Agency Q05 specification for managing bitumen quality report](#)

Need more information?

At Road Science, we're committed to providing innovative solutions backed by engineering expertise. If you have any questions about this product, need technical guidance, or want to discuss how it fits your specific project needs, our team is here to help. Contact us today for expert advice and tailored support. Contact us via **0800 180 200** or visit our website at roadscience.co.nz to learn more.

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