



USED FOR



Waterproofing



Cracking

ENVIRONMENTS



Residential



Rural



High-performance bitumen emulsion for chip sealing

EnviroSeal is a high-performance 72% bitumen chip sealing emulsion engineered for use as a binder in all chip sealing applications. Designed for safety, consistency, and operational efficiency, EnviroSeal is compatible with both 130/150 and 180/200 bitumen grades and is applied at a safe temperature of 80°C.

EnviroSeal provides a safer, lower-temperature alternative to traditional hot-applied chip sealing binders - without compromising performance. It delivers reliable results across all chip sealing techniques, helping crews work more safely and efficiently while achieving durable, high-quality seals.

Where to use EnviroSeal

- Universal chip sealing applications
- Versatile for all sealing techniques including two-coat seals, racked-in seals, sandwich seals, and first-coat seals

Benefits

- Lower application temperature (Delivered at a temperature of 75°C)
- Excellent chip adhesion
- Extended sealing season
- Lower emissions
- Safe + practical application

Specification

Typical properties of EnviroSeal

Property	Method	Specification
Binder content	In-house method	>72%

Properties



Emulsion



Reduced Emissions

Handling

For safe handling of bituminous materials, please refer to the [Road Science bitumen emulsion safety data sheet](#), the below table, and the [Best practice guideline: Safe Handling of bituminous materials used for roading \(BPG01\)](#)

EnviroSeal	
Normal safe handling temperature	70°C-90°C
Maximum safe handling temperature	90°C
Pumping binder temperature	70°C
Normal spray temperature	70°C - 90°C

Circulation

EnviroSeal should be circulated for at least 1 hour prior to commencing spraying.

Heating

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

Never heat beyond 90°C.

Storage

EnviroSeal	
Short term storage temperature (up to 2 days)	70°C
Medium term storage temperature (3 to 5 days)	20°C - 50°C
Long term storage temperature (beyond 5 days)	20°C - 50°C
Critical: Long term storage	
If there is a need to postpone spraying beyond 5 days, the storage temperatures of EnviroSeal should be dropped to <50°C.	
Never allow EnviroSeal to freeze, as due to the presence of water in the emulsion, the emulsion will break.	

Application

Refer to the seal design application rates for the specified project.

EnviroSeal is a water-based product and care should be taken with regard to risks associated with rain and runoff. Normal environmental control precautions for the use of emulsions should be taken.

Note: The option of using EnviroSeal is available in [Zeus](#), Road Science's targeted weather insights tool.

Equipment

Conventional bitumen/emulsion sprayer.

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.

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 EnviroSeal including face shield as the product is transferred at slightly elevated temperatures and splashes are always a risk. Testing should only be carried out by an IANZ-accredited laboratory that is experienced in handling and testing bitumen emulsions.

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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