

ENVIRO-PREM

SOLVENT FREE EMULSION FOR PRIMING AND GRANULAR SEALING

PRODUCT DESCRIPTION

ENVIRO-PREM emulsion is a solvent-free, environmentally friendly anionic emulsion that is designed primarily for priming and granular sealing. The emulsion is also suitable for other uses, such as tack coating or various industrial uses.

The combination of asphalt and special penetrating agents gives the **ENVIRO-PREM** the ability and wetting power needed for penetrating deep into the granular surface, while binding the aggregate particles to achieve stabilization.

GENERAL PRODUCT FEATURES

- Low viscosity anionic emulsion designed for optimum flow
- Excellent wetting capabilities for fine and very fine aggregate particles
- Very small particle size emulsion, which confers the means of penetrating capillary sized pores and small voids in the compacted granular layer
- Unlike traditional emulsified primes, the ENVIRO-PREM emulsion contains no hydrocarbon solvent fractions.
 This makes the product VOC free and compliant with the newest and most stringent environmental requirements
- Provides excellent performance for highway shoulder priming and sealing, thereby stabilizing the shoulders and preventing water ingression into the road base
- Stabilizes granular bases prior to paving
- Primed granular bases can be opened to traffic for a number of days prior to paving

RECOMMENDED USE

ENVIRO-PREM emulsion is formulated for successful use as emulsified primer or granular sealant. It also performs well as a tack coat and as a dust control emulsion.

ENVIRO-PREM can be used with scarification and compaction, or be sprayed directly onto the granular base. Once the emulsion has penetrated the granular material and cured, the road can be opened to traffic. The primed base provides superior stability and strength and allows the paving process to achieve better density and less movement during compaction.

SPECIFICATIONS AND TYPICAL RESULTS

TEST	TYPICAL DATA	SPEC RANGE	
		Min	Max
Tests on Emulsion			
SF Viscosity, 25°C, SFs	14.5	5	50
Sieve Test, No.20, %	0.02		0.1
Storage Stability, 24h, %	1.0		1.5
Dist. Residue, 260°C, %	42.5	35	
Oil Portion of Dist., %	trace		trace
Particle Charge	(-)	(-) or (0)	
Tests on Residue			
Penetration, 25°C, dmm	85	40	100
Solubility in TCE, %	99.9	97.5	
Ductility, 25°C, cm	68	40	

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APPLICATION GUIDELINES

GRANULAR SEALING

ENVIRO-PREM is applied to a granular surface at a spray rate of 2.0 to 3.5 L/m² (3.0 l/m² for distributor work, and 3.5 L/m² for handwork).

PRIME COATS

ENVIRO-PREM is applied to a granular base as a prime coat at an approximate spray rate of 1.0 to 2.0 L/m².

TACK COATS

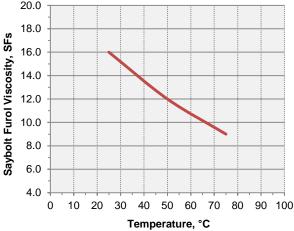
ENVIRO-PREM is applied to an existing HMA surface to eliminate slippage planes and to provide a bond between pavement lifts. Spray rates range from 0.25 to 0.70 L/m² (0.05 to 0.15 gal/yd²).

DUST CONTROL

ENVIRO-PREM is ideal for spraying on low volume, unpaved roads as a means of dust control. This emulsion is sprayed in repeated light applications at a rate of 0.45 to 2.25 L/m² (0.1 to 0.5 gal/yd²), depending on the condition of the existing surface.

TEMPERATURE - VISCOSITY CURVE





PACKAGING, STORAGE AND HANDLING

- ENVIRO-PREM should be stored in bulk tanks, vertical if possible to minimize surface area.
- Do not allow ENVIRO-PREM to either freeze or boil it will break. Storage temperature should not be allowed to fall below 10°C or exceed 85°.
- In all bulk storage, mix the ENVIRO-PREM every 1–2
 weeks (more frequently in cold weather). Mixing may be
 by paddle agitator (slow), loose gear pump, slow
 centrifugal pump, or other suitable low shear pump.
- Do not bubble air through ENVIRO-PREM to agitate it, this creates excessive foam and may cause the emulsion to break.
- Always use clean containers. Ensure prior contents are compatible with ENVIRO-PREM or the emulsion may break.

CERTIFICATION OF QUALITY

McAsphalt Industries Limited is accredited to the quality standard ISO 9001 and to the environmental standard ISO 14001.

Each lot of **ENVIRO-PREM** is produced using the strictest quality, safety and environmental guidelines. Each production lot is tested to ensure it meets or exceeds all performance requirements, and it is delivered with a Certificate of Analysis.

PRODUCT SUPPORT

With the *MCA* **Advantage**, you get a partner and advisor who will consult with you about designs, specifications, technical services, processes and material selection. By developing innovative, custom-designed products that offer additional benefits, such as peak performance in unique conditions, improved field performance, greater environmental and health benefits, the *MCA* **Advantage** provides significant long-term cost savings, resulting in lower "total cost of ownership."

