

HP-200

SPRAY-GRADE ANIONIC ASPHALT EMULSION

PRODUCT DESCRIPTION

HP-200 is a medium-setting anionic asphalt emulsion that reacts with aggregate moderately fast to convert from an emulsion to asphalt.

Asphalt emulsions are classified according to the electric charge that surrounds the emulsion’s asphalt particles (i.e. whether it is a cationic or an anionic emulsion) and how quickly the suspended asphalt particles separate from the surrounding water (“breaking”). A medium-setting emulsion is one that will break moderately fast when in contact with aggregate. The setting speed of any emulsion is relative to atmospheric conditions at the time of construction.

GENERAL PRODUCT FEATURES

- **HP-200**’s ability to penetrate into the granular base promotes a better bond between the surface treatment and the substrate.
- Due to its relatively high viscosity, this product may be sprayed in thicker films.
- Thicker coatings on aggregates due to **HP-200**’s high viscosity lead to increased durability.
- Although technically classified as a medium-setting emulsion, **HP-200** exhibits rapid-setting properties while still maintaining good workability.
- Specifically designed to be used with dirty and unwashed chips
- Has good wetting power to penetrate dust films on unwashed or dirty aggregate
- Traffic can be restored very shortly after application.
- No runoff
- Seals narrow cracks against moisture penetration
- Can be utilised closer to unfavourable weather than otherwise possible with other conventional chip seal emulsions

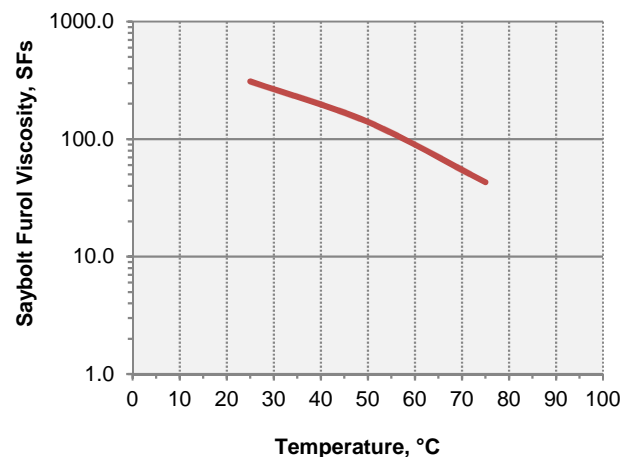
RECOMMENDED USE

- **HP-200** cures quickly and produces thick asphalt films. Its viscosity permits a higher spray rate without the danger of runoff.
- **HP-200** is ideal for spray applications such as chip seals and double surface treatments using unwashed or dirty aggregate.
- **HP-200** is not suitable for continuously-graded aggregate seals.

SPECIFICATIONS AND TYPICAL RESULTS

TEST	TYPICAL DATA	SPEC.	
		Min	Max
Tests on Emulsion			
SF Viscosity, 50°C, SFs	172	100	250
Sieve Test, 850 µm, %	0.01	-	0.1
Settlement, 5 days, %	0.6	-	3.0
Distillation Residue, 260°C, %	67.2	65	-
Demulsibility, 50ml 0.02 N CaCl ₂ , %	35	30	70
Particle Charge	(-)	(-)	
Tests on Residue			
Penetration, 25°C, dmm	110	100	200
Ash Content, %	0.11	-	1

TEMPERATURE VISCOSITY CHART



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 ISO 9001/14001/45001

HP-200**SPRAY-GRADE ANIONIC ASPHALT EMULSION****APPLICATION GUIDELINES**

- Do not apply if precipitation is anticipated.
- Do not dilute product with any cutter stock or water.

DESIGN GUIDELINES

Designs should be formulated prior to initial production and each time aggregate sources are changed. Testing of the final product is highly recommended to ensure a quality seal. **MCA Technical Services** offers complete design services and product quality analysis.

CHIP SEALS/SURFACE TREATMENTS

A uniform application of **HP-200** asphalt emulsion to a prepared surface followed by a uniform application of cover aggregate. Aggregates used should be a single-sized, unwashed chip with sizes ranging from 6 mm (¼ in) to 19 mm (¾ in). Spray rates will be determined by the design depending on aggregate size, type, and whether a single or double surface treatment is employed.

PACKAGING, STORAGE AND HANDLING

- **HP-200** should be stored in bulk tanks, ideally vertical to minimize surface area.
- Do not allow **HP-200** to either freeze or boil: it will break. Safe storage temperatures range from 10°C (50°F) to 85°C (185°F).
- In bulk storage, mix the **HP-200** every 1 to 2 weeks (more frequently in cold weather). Mixing may be done by paddle agitator (slow), loose gear pump, slow centrifugal pump, or other suitable low shear pump.
- Do not bubble air through **HP-200** to agitate it: this creates excessive foam and may cause the **HP-200** to break.
- Always use clean storage containers. Make sure prior contents are compatible with **HP-200** or the emulsion may break.
- Only use approved and sealed containers for sampling the emulsion.

CERTIFICATION OF QUALITY

McAsphalt Industries Limited is accredited to the quality management standard **ISO 9001**, the environmental management standard **ISO 14001**, and the occupational health and safety standard **ISO 45001**.

Each lot of **HP-200** 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 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, and greater environmental and health benefits, the **MCA Advantage** provides significant long-term cost savings, resulting in lower total cost of ownership.

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