HP-200P

ANIONIC SPRAY-GRADE POLYMER-MODIFIED ASPHALT EMULSION

PRODUCT DESCRIPTION

HP-200P is a medium-setting, polymer-modified anionic asphalt emulsion that reacts with the 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.

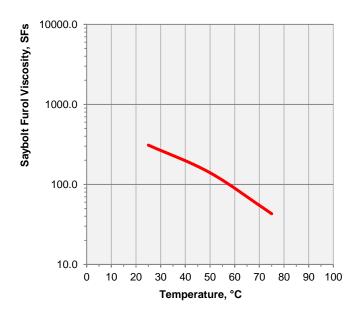
GENERAL PRODUCT FEATURES

- HP-200P'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-200P's high viscosity lead to increased durability.
- Although technically classified as a medium-setting emulsion, HP-200P exhibits rapid-setting properties while still maintaining good workability.
- Specifically designed to be used with dirty and unwashed chips
- 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

SPECIFICATIONS AND TYPICAL RESULTS

TEST	TYPICAL	SPEC.	
	DATA	Min	Max
Tests on Emulsion			
SF Viscosity, 50°C, SFs	175	100	250
Sieve Test, 850 µm, %	0.01	-	0.1
Settlement, 5 days, %	1.2	-	3.0
Distillation Residue, 260°C, %	66.2	65	-
Demulsibility, 50 ml 0.02 N CaCl ₂ , %	35	30	70
Tests on Residue			
Penetration, 25°C, dmm	102	75	200
Ash Content, %	0.09	-	1
Elastic Recovery, 10°C, %	59	55	-

TEMPERATURE VISCOSITY CHART



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RECOMMENDED USE

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

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 SEAL/SURFACE TREATMENTS

HP-200P is ideally mixed with graded aggregate typically all passing the 16 mm (5/8 in) or 12.5 mm (½ in) sieve, with 60–70% passing the 4.75 mm (no. 4) sieve and preferably not more than 6% passing the 0.075 mm (no. 200) sieve. Graded aggregate is an alternative to the more expensive, single-sized cover stone chip.

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-200P** 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.

PACKAGING, STORAGE AND HANDLING

- HP-200P should be stored in bulk tanks, ideally vertical to minimize surface area.
- Do not allow HP-200P 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-200P 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-200P to agitate it: this creates excessive foam and may cause the HP-200P to break.
- Always use clean storage containers. Make sure prior contents are compatible with HP-200P or the emulsion may break.
- Only use approved and sealed containers for sampling the emulsion.

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.

