

## MACPATCH HPB

### SPECIALTY HIGH PERFORMANCE BINDER FOR COLD MIX

#### PRODUCT DESCRIPTION

**MACPATCH HPB** is a high performance asphalt cutback specifically designed and formulated for use in the production of **MACPATCH**, a proprietary high performance cold patching material.

#### RECOMMENDED USE

**MACPATCH HPB** has been specially formulated to enhance the workability of cold mix during handling and to improve the adhesive properties of the binder during its service life.

**MACPATCH HPB** is used as a binder in the production of specialty cold mixes and provides users with greater flexibility compared to hot mix alternatives that must be kept hot and bring additional costs when work is delayed.

#### GENERAL PRODUCT FEATURES

- Available in several commercial and seasonal grades, **MACPATCH HPB** is tailor-made to meet your specific cold mix needs.
- Unique binder formulation provides resistance to stripping and bleeding.
- Excellent aggregate coating abilities and reduced moisture susceptibility
- Mixed in conventional hot mix plants or pug mills
- Provides excellent low temperature flexibility and cohesive properties
- Remains pliable in stockpiles

#### 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 **MACPATCH HPB** 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.

#### SPECIFICATIONS AND TYPICAL RESULTS

TEST	TYPICAL DATA	SPEC.	
		Min	Max
<b>Tests on Cutback</b>			
Flash Point (COC), °C	<b>90+</b>	80	-
Kinematic Viscosity, 60°C, cSt	<b>525</b>	400	800
Water Content, %	<b>trace</b>	-	0.2
<b>Distillation Test</b>			
225°C, %	<b>0</b>	-	-
260°C, %	<b>2.5</b>	0	5
315°C, %	<b>12.5</b>	0	25
Distillation Residue to 360°C, %	<b>82</b>	72	95
<b>Tests on Residue</b>			
Penetration, 25°C, dmm	<b>200+</b>	85	-
Ductility, 25°C, cm	<b>100+</b>	100	-
Solubility in TCE, %	<b>99.82</b>	99.0	-

#### PACKAGING, STORAGE AND HANDLING

##### STORAGE

- Store in accordance with local regulations.
- Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials.
- Keep container tightly closed and sealed until ready for use.
- Containers that have been open must be carefully resealed and kept upright to prevent leakage.
- For more detailed information, please contact your **MCA Marketing** representative for an SDS.

##### SHIPPING

Can TDG, 3256, Class 3, Packing Group II



#### MCASPALT INDUSTRIES LIMITED

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 ISO 9001/14001/45001

**MACPATCH HPB****SPECIALTY HIGH PERFORMANCE BINDER FOR COLD MIX****APPLICATION GUIDELINES**

**MACPATCH HPB** specifications will vary and are dependent on climatic zone, aggregate type and gradation, and seasonal requirements.

**DESIGN CRITERIA**

Mix designs should be formulated prior to initial production and each time aggregate sources are changed. Testing of final product is highly recommended to ensure a quality mix.

**MCA Technical Services** offers complete mix design services and product quality analysis.

**TYPICAL AGGREGATE SPECIFICATIONS**

Aggregate should be 100% crushed limestone or an equivalent meeting ASTM C-136. Recommended gradation and physical properties are as follows:

SIEVE SIZE	% PASSING (BY WEIGHT)
9.5 mm (3/8")	<b>85 to 98</b>
4.75 mm (#4)	<b>50 to 85</b>
2.36 mm (#8)	<b>35 to 65</b>
1.18 mm (#16)	<b>25 to 50</b>
75 µm (#200)	<b>0 to 7</b>

AGGREGATE PROPERTY	REQUIREMENT
Soundless Loss (ASTM C88)	<b>12% max</b>
LA Abrasion (ASTM C131)	<b>40% max</b>
Absorption (ASTM C127)	<b>2% max</b>
Specific Gravity (ASTM C127)	<b>2.55 to 2.75</b>
Soft Aggregates (ASTM C123)	<b>3% max</b>
-200 Sieve by Wash (ASTM C117)	<b>2% max</b>

**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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