

HEMUCRYL* ENAMEL HI-BUILD 5803₀

Description:	HEMUCRYL ENAMEL HI-BUILD 5803 is a water-borne, acrylic dispersion based paint. It dries to a non-yellowing and glossy coating with low dirt pick-up, good weathering properties, and high gloss retention. Especially suited for application by airless spray.
Recommended use:	As a glossy, finishing coat in water-borne paint systems, interior and exterior, in mildly to moderately corrosive environment on structures free of sharp edges and crevices. For use on buildings the relatively high resistance to diffusion of water vapour and carbon dioxide should be taken into account. For handrails and the similar, a chemically curing coating is alternatively recommended.
Service temperatures:	Maximum, dry: 120°C/248°F.
Approvals:	Approved as a low flame spread material by British, Danish, Italian and Canadian authorities.
Availability:	Subject to confirmation.

PHYSICAL CONSTANTS:

Colours/Shade nos:	White/10000 (<i>Other shades according to assortment list</i>)
Finish:	Glossy
Volume solids:	44%
Theoretical spreading rate:	5.9 m ² /litre - 75 micron 235 sq.ft/US gallon - 3 mils
Flash point:	> 66°C/151°F
Specific gravity:	1.2 kg/litre - 10.0 lbs/US gallon
Surface dry:	¾ (approx.) hour at 20°C/68°F (<i>ISO 1517</i>)
Dry to touch:	1½ (approx.) hour at 20°C/68°F (<i>See REMARKS overleaf</i>)
V.O.C.:	4 g/litre - 0.0 lbs/US gallon 119 g/litre - 1.0 lbs/US gallon (<i>ASTM D 3960 - water reduced</i>)

*The physical constants are subject to normal manufacturing tolerances.
Further reference is made to "Explanatory Notes" in the Hempel Book.*

APPLICATION DETAILS:

Application method:	Airless spray Brush (touch-up)
Thinner (max.vol):	Fresh water (5%) HEMUCRYL BRUSH AGENT 9981 (3-8%)
Nozzle orifice:	015"-.019" (<i>See REMARKS overleaf</i>)
Nozzle pressure:	130 bar/1900 psi (<i>Airless spray data are indicative and subject to adjustment</i>)
Cleaning of tools:	Fresh water (<i>See REMARKS overleaf</i>)
Indicated film thickness, dry:	75 micron/3 mils (<i>See REMARKS overleaf</i>)
Indicated film thickness, wet:	175 micron/7 mils
Recoat interval, min:	2 hours (20°C/68°F)
Recoat interval, max:	None (<i>See REMARKS overleaf</i>)

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SURFACE PREPARATION:	<p>Preceding coats should be sound and tightly adhering. Remove oil and grease with suitable detergent. Remove salts and other contaminants by (high pressure) fresh water cleaning. Remove rust and loose material by abrasive blasting or power tool cleaning. Dust off residues. Touch up to full system before recoating with HEMUCRYL ENAMEL HI-BUILD 5803.</p> <p>Concrete: All oil, grease and other contaminants must be removed e.g. by abrasive blasting, volatilizing by flame cleaning or treatment with HEMPEL'S NAVI WASH 9933 the last mentioned in the following way:</p> <ol style="list-style-type: none">1) saturation of the surface with fresh water,2) Washing with HEMPEL'S NAVI WASH 9933 followed by fresh water hosing. <p>Remove dust and loose material e.g. by stiff brushes or by abrasive blasting, high pressure jetting or flame cleaning depending on circumstances. Three last mentioned methods are also able to remove scum layer if necessary. After surface preparation the surface should feel solid and hard. Saturate surface with suitable sealer, eg microdispersed acrylic HEMUCRYL CONCRETE SEALER 2882.</p>
APPLICATION CONDITIONS:	<p>Use only where application can proceed at temperatures above 5°C/41°F, preferably above 10°C/50°F. Apply on a clean and dry surface with a temperature above the dew point to avoid condensation.</p> <p>Relative humidity: During application above 60%, preferably 75-90%, to avoid dry spray. During drying below 80%, preferably between 40-60%. (Contact HEMPEL for further advice). Good ventilation during application and drying is necessary. During drying it is of utmost importance that sufficient ventilation is covering all parts of the surfaces painted. Ventilation requirements to remove the water vapours liberated during application and drying are approximately 75 m³/litre of the paint at 20°C/68°F. (Relative humidity of the air supply 40%).</p>
PRECEDING COAT:	<p>HEMUCRYL PRIMER HI-BUILD 1803, HEMUDUR 1850 or HEMUCRYL CONCRETE SEALER 2882.</p> <p>Other paints may precede but consult nearest HEMPEL office. Certain types of aged, solvent based coatings can be recoated after a careful cleaning. A testpatch is recommended. Aged, chemically cured coatings (alkyd, epoxy, polyurethane etc.) may also precede. Yet, only recommended in case of later mild exposure - roughening may be necessary and a testpatch is recommended.</p>
REMARKS:	
Colours:	<p>Certain lead-free red and yellow colours may discolour when exposed to sulphide and chlorine-containing atmosphere.</p>
Film thicknesses:	<p>May be specified in another film thickness than indicated. This will alter spreading rate and may influence drying time and recoating interval. Normal range is 50-100 micron/2-4 mils dry film thickness. When used in 50 micron dry film thickness, 3-5% thinning will be necessary to secure proper film formation.</p>
Application:	<p>For proper film formation the recommended nozzle sizes should be used.</p> <p>If application is done by roller/brush, apply liberally. Use brushes with synthetic fibres. Rollers should either be mohair or felt.</p> <p>For brush application, add 3-8% by volume of HEMUCRYL BRUSH AGENT 9981.</p>
Exposure to low temperature shortly after application:	<p>If the painted items will be exposed to humidity/water at temperatures below 5-10°C/41-50°F shortly after finishing the paint application, it is of utmost importance for later good performance that following rules are complied with:</p> <ul style="list-style-type: none">- Excessive film thickness must be avoided.- The (last applied) paint layer must dry for at least 24 hours at 20°C/68°F before exposure.
Recoating:	<p>No maximum recoating interval, but after prolonged exposure to polluted atmosphere remove accumulated contamination by high pressure fresh water cleaning and allow to dry.</p>
Shelf life/storage:	<p>Store at temperatures between 5°C-40°C/41°F-104°F. Shelf life is reduced at temperatures above 30°C/86°F. Do not expose to frost during storage and transport, or before the coating is dry.</p>
Notes:	<p>Clean tools carefully with fresh water or lukewarm soap water immediately after use.</p> <p>Dried remains of paint can be removed with HEMPEL'S NAVI WASH 9933, undiluted, or preferably with HEMPEL'S TOOL CLEANER 9961.</p>
SAFETY:	<p>HEMUCRYL ENAMEL HI-BUILD 5803 is for professional use only.</p> <p>Handle with care. Before and during use, observe all safety labels on packaging and paint containers, consult HEMPEL Material Safety Data Sheets and follow all local or national safety regulations. Harmful or fatal if swallowed; immediately seek medical assistance if swallowed. Avoid inhalation of possible solvent vapours or paint mist, as well as paint contact with skin and eyes. Apply only in well ventilated areas and ensure that adequate forced ventilation exists when applying paint in confined spaces or when the air is stagnant. Always take precautions against the risks of fire and explosions.</p>

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