

# HEMPEL'S TAPECRETE MARINE COATING 68180

TAPECRETE LIQUID 68189  
DRY MIX 68186

**Description:** HEMPEL'S TAPECRETE MARINE COATING 6818 is a high solids and light coloured cementitious coating. It is a two component material supplied as a powder mix with a maximum grain size of 0.5 mm and a water borne acrylic dispersion.

**Recommended use:** As a damp surface tolerant and moisture curing coating for repair and maintenance of ballast tanks and potable water tanks under conditions, where application of traditional paint coatings is difficult. The cured coating is mechanically robust.  
Not suitable in connection with cathodic protection, on galvanized steel, on zinc-shoppripped surfaces or on PVB shopprippers (wash primers).

**Service temperatures:**

	Dry:	In water (no temperature gradient):
Maximum:	120°C/248°F	40°C/104°F

**Approvals, certificates:** Listed by Canada's Ministry of the Environment, Water Resources Branch for use in potable water contact.  
Approved by Water Research Centre, Great Britain, for use in contact with potable water.  
After testing at Marintek, a subsidiary of Sintef in Norway, HEMPEL'S TAPECRETE MARINE COATING 6818 was given the highest classification, B1.  
Approved by Lloyd's Register of Shipping as a provisionally recognized corrosion control coating.

**Availability:** Subject to confirmation.

## PHYSICAL CONSTANTS:

Colours/Shade nos: Grey/11670 - Off-white/11630  
Finish: Flat  
Volume solids: 94% (*microscopical evaluation*)  
Theoretical spreading rate: 1.3 m<sup>2</sup>/litre - 750 micron

50 sq.ft./US gallon - 30 mils  
Flash point: non-flammable  
Specific gravity: 2.1 kg/litre - 17.6 lbs/US gallon  
Ready for immersion in potable water: 24 hours at 20°C/68°F (*see REMARKS overleaf*)

Shelf life: Dry mix: 12 months in unopened packings when stored under dry and cool conditions, see REMARKS overleaf.

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

## APPLICATION DETAILS:

Mixing ratio for 68180: DRY MIX 68186: 25 kg/55 lbs  
TAPECRETE LIQUID 68189: 5 litres/1.3 US gallons  
Total: 13.8 litres/3.6 US gallons mixed paint

It is very important that the prescribed mixing procedure is followed - see also REMARKS overleaf and separate APPLICATION INSTRUCTIONS.

**Application method:** By brush or spray. Spray application requires a worm pump like Putzmeister TS 3 equipped with a Putzmeister plast spray gun 071473.006. Use a 25 mm/1" material hose and 2-3 bar air pressure for atomization. Furthermore, reference is made to separate APPLICATION INSTRUCTIONS.

**Thinner:** See REMARKS overleaf

**Pot life:** 3 hours (20°C/68°F) Pot life is very dependent on correct mixing  
(*see separate APPLICATION INSTRUCTIONS*)

**Cleaning of tools:** Fresh water

**Indicated film thickness, dry:** 750 micron/30 mils (*see REMARKS overleaf*)

**Indicated film thickness, wet:** 750 micron/30 mils

**Recoat interval, min:** 2-3 hours (20°C/68°F) (*see REMARKS overleaf*)

**Recoat interval, max:** None

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## 2. HEMPEL'S TAPECRETE MARINE COATING 68180

SURFACE PREPARATION:	<p>Remove all oil, grease, mud and similar contaminants with a suitable detergent followed by high pressure fresh water hosing.</p> <p>Remove rust and scale to a degree of cleaning corresponding to minimum Sa 1 or St 2, ISO 8501-1:1988. Be sure to remove rather than polish possible scale to avoid flaking during use.</p> <p>Hose down sound and intact areas with fresh water. Existing epoxy or coal tar epoxy system <b>must</b> be uniformly matted by grinding or abrasive sweep blasting. Surface preparation methods using water, eg waterjetting and wet abrasive blasting can be used advantageously together with the moisture curing, damp surface tolerant TAPECRETE MARINE COATING 6818.</p>
APPLICATION CONDITIONS:	<p><b>The absolute minimum surface temperature is 10°C/50°F</b> and the maximum surface temperature should preferably be below 30°C/84°F. During application there are no restrictions to relative humidity, ie the surface may be damp or moist, but standing water or droplets must be removed.</p>
REMARKS:	
Mixing:	<p>TAPECRETE LIQUID 68189 is delivered in plastic cans containing 5 litres/5.2 kg or in 200 litres drums. TAPECRETE MARINE COATING DRY MIX 68186 is delivered in 25 kg plasticlined paperbags packed in 20-litre plastic drums.</p>
Mixing procedure:	<p>Stir the liquid thoroughly, especially if only part of the liquid is used. Transfer the liquid to the 20-litre drum or other suitable mixing vat and add the dry mix slowly under good agitation with a standard mortar mixer or slow-speed spiral type power mixer. Continue until the mixture is smooth and free of agglomerations, typically 5 minutes, <b>then leave the mix to prereact for 10 minutes and REMIX</b>. Reference is made to separate APPLICATION INSTRUCTIONS.</p>
Mixing ratios:	<p>Mix 5 litres of TAPECRETE LIQUID with 25 kg TAPECRETE MARINE COATING DRY MIX 68186 for spray application (mixed paint: 13.8 litres/3.6 US gallons). For brush application mix 6 litres TAPECRETE LIQUID to 25 kg TAPECRETE MARINE COATING DRY MIX 68186 (mixed paint: 14.8 litres/3.9 US gallons).</p>
Thinning:	<p>Thinning is normally not necessary. However, 1-2% TAPECRETE LIQUID 68189 may be used to adjust viscosity. <b>Do not use water</b>. Reference is made to separate APPLICATION INSTRUCTIONS.</p>
Film thicknesses:	<p>TAPECRETE MARINE COATING 6818 is normally specified in two coats.</p> <p><b>Fresh water tanks:</b> 2 coats, each 0.5 mm/20 mils minimum.</p> <p><b>Ballast tanks:</b> 2 coats, each 0.75 mm/30 mils minimum.</p>
Recoating:	<p>The correct minimum recoating interval has been obtained, when recoating does not mechanically damage the first coat caused by the pressure of the brush or by the spray application. <b>This condition must be reached within 2-3 hours or (extra) ventilation must be provided.</b></p>
Curing before filling of tanks:	<p>Tanks for fresh water may be filled after 24 hours. Before taking the tank into use for drinking water, fill the tank twice with fresh water, each time for a period of not less than 24 hours, and finally flush with fresh water. Ballast tanks <b>must</b> be hosed down with <b>fresh water</b> 24 hours after application. Keep the surface humid for 2 more days then hose down once more with fresh water. Alternatively, ballast tanks could be filled with fresh water 24 hours after application and be kept filled for two more days <b>before</b> filling with seawater. The correctly applied coating is hard, firmly adhering and shows no chalking or loose surface layer.</p>
Maintenance:	<p>Regular maintenance of the coating is carried out by scraping or grinding off loose material followed by brush application of TAPECRETE MARINE COATING 6818 to a minimum of 1 mm/40 mils dry film thickness, normally 2 coats.</p>
Storage:	<p>Store TAPECRETE LIQUID 68189 at temperatures above 1°C/34°F and below 40°C/104°F. TAPECRETE MARINE COATING DRY MIX 68186 must be stored under dry conditions.</p>
Note:	<p><b>HEMPEL'S TAPECRETE MARINE COATING 6818 is for professional use only.</b></p>
SAFETY:	<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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