

# APPLICATION INSTRUCTIONS

For product description refer to product data sheet

## HEMPADUR\* ZINC 1534<sub>1</sub>/ HEMPADUR\* ZINC 1534<sub>3</sub>

High temperatures: 1534<sub>1</sub> with CURING AGENT 95740  
Low to medium temperatures: 1534<sub>3</sub> with CURING AGENT 95570

**Film thickness:** Depending on area of use the dry film thickness may vary between 30 micron/1.2 mil and up to 50 micron/2 mils. This will alter amount of thinning needed, spreading rate, drying time and recoating interval as described below.

Indicated film thicknesses are as follows:

**Primer, container systems:** When used as a primer in container systems the dry film thickness is approx. 30-40 micron/1.2-1.6 mils corresponding to 60-80 micron/2.4-3.2 mils wet film thickness. Dilute 5-10% for airless spray.

**General purpose primer:** When used as a general purpose primer, dry film thickness is 40-50 micron/1.6-2 mils corresponding to 80-100 micron/3.2-4 mils wet film thickness. Thinning is normally not necessary.

**Spreading rates:** The film thickness and the spreading rate are inversely proportional. By controlling the spreading rate, a check of the film thickness can be made.

Theoretical spreading rate calculated for undiluted paint with:

**CURING AGENT 95740:**

30 micron/1.2 mils is 16.0 m<sup>2</sup>/litre or 641 sq.ft./US gallon

50 micron/2 mils is 9.6 m<sup>2</sup>/litre or 385 sq.ft./US gallon

**CURING AGENT 95570:**

30 micron/1.2 mils is 18.3 m<sup>2</sup>/litre or 735 sq.ft./US gallon

50 micron/2 mils is 11.0 m<sup>2</sup>/litre or 441 sq.ft./US gallon

**Thinners:** **Airless spray:** HEMPEL'S THINNER 0845 or 0857. Lowest nozzle pressure should be used when highest amount of thinner is added. THINNER 0857 is used for fast setting at application in shops. (Be aware of increased risk of dry spray).

**Air spray:** HEMPEL'S THINNER 0845.

**Application by brush:** HEMPEL'S THINNER 0845.

**Physical data  
Versus temperature:**

Drying time and recoating interval vary with film thickness, curing agent used, drying/ curing temperatures and later exposure conditions.

**15341 (CURING AGENT 95740) in dry film thicknesses of 30-40 micron/ 1.2-1.6 mils:**

Surface temperature	10°C/50°F	20°C/68°F	30°C/86°F
Drying time, approx minutes	1 hour	30	20
Curing time, approx days	18	7	4
<b>Minimum recoating interval related to later conditions of exposure:</b>			
<b>Interval for recoating with 4633, 4637, 4641, 4664 5803</b>			
Atmospheric	40 minutes	15 minutes	7 minutes
Medium			
Severe	2½ hours	1 hour	30 minutes
Immersion*	5 hours	2 hours	1 hour
<b>Interval for recoating with HEMPADUR and HEMPATANE qualities</b>			
Atmospheric			
Medium	5 hours	2 hours	1 hour
Severe	8 hours	3 hours	1½ hours
Immersion**	15 hours	6 hours	3 hours
<b>Maximum recoating interval related to later conditions of exposure:</b>			
<b>Interval for recoating with 4633</b>			
Atmospheric			
Medium	4 days	36 hours	18 hours
Severe	2½ days	24 hours	12 hours
Immersion	40 hours	16 hours	8 hours
<b>Interval for recoating with 4637, 4641, 4664</b>			
Atmospheric			
Medium	40 hours	16 hours	8 hours
Severe	30 hours	12 hours	6 hours
Immersion	Not relevant	Not relevant	Not relevant
<b>Interval for recoating with 5803</b>			
Atmospheric			
Medium	10 days	4 days	2 days
Severe	5 days	2 days	1 day
Immersion	Not relevant	Not relevant	Not relevant
<b>Interval for recoating with HEMPADUR qualities</b>			
Atmospheric			
Medium	None	None	None
Severe***	75 days	30 days	15 days
Immersion***	75 days	30 days	15 days
<b>Interval for recoating with HEMPATHANE qualities</b>			
Atmospheric			
Medium	25 days	10 days	5 days
Severe	7½ days	3 days	1½ day
Immersion	Not relevant	Not relevant	Not relevant

\* Only 4633 is recommended for this exposure

\*\* NOT relevant for HEMPATANE Qualities

\*\*\* If the coating has been subjected to direct sunlight for a short period only, the maximum recoating interval may be prolonged.

**Physical data  
Versus temperature:**

Drying time and recoating interval vary with film thickness, curing agent used, drying/ curing temperatures and later exposure conditions.

**15343 (CURING AGENT 95570) in dry film thicknesses of 30-40 micron/ 1.2-1.6 mils:**

Surface temperature	0°C/32°F	10°C/50°F	20°C/68°F
Drying time, approx minutes	1½ hour	40	20
Curing time, approx days	1 month	14	7
<b>Minimum recoating interval related to later conditions of exposure:</b>			
<b>Interval for recoating with 4633, 4637, 4641, 4664 5803</b>			
Atmospheric			
Medium	60 minutes	25 minutes	15 minutes
Severe	2½ hours	1 hour	½ hour
Immersion*	4½ hours	2 hours	1 hour
<b>Interval for recoating with HEMPADUR and HEMPATANE qualities</b>			
Atmospheric			
Medium	4½ hours	2 hours	1 hour
Severe	11 hours	5 hours	2½ hours
Immersion**	23 hours	10 hours	5 hours
<b>Maximum recoating interval related to later conditions of exposure:</b>			
<b>Interval for recoating with 4633</b>			
Atmospheric			
Medium	54 hours	24 hours	12 hours
Severe	36 hours	16 hours	8 hours
Immersion	36 hours	16 hours	8 hours
<b>Interval for recoating with 4637, 4641, 4664</b>			
Atmospheric			
Medium	36 hours	16 hours	8 hours
Severe	23 hours	10 hours	5 hours
Immersion	Not relevant	Not relevant	Not relevant
<b>Interval for recoating with 5803</b>			
Atmospheric			
Medium	Not relevant	6 days	3 days
Severe	Not relevant	3 days	1½ days
Immersion	Not relevant	Not relevant	Not relevant
<b>Interval for recoating with HEMPADUR qualities</b>			
Atmospheric			
Medium	None	None	None
Severe***	90 days	60 days	30 days
Immersion***	90 days	60 days	30 days
<b>Interval for recoating with HEMPATHANE qualities</b>			
Atmospheric			
Medium	45 days	20 days	10 days
Severe	13 days	6 days	3 days
Immersion	Not relevant	Not relevant	Not relevant

\* Only 4633 is recommended for this exposure

\*\* NOT relevant for HEMPATANE Qualities

\*\*\* If the coating has been subjected to direct sunlight for a short period only, the maximum recoating interval may be prolonged.

The minimum recoating intervals assume sufficient ventilation and correct application. In case of forced ventilation and/or drying at higher temperatures sufficient "flash-off" time should be allowed for. Approximately 30 micron/1.6 mils dry film thickness count for minimum 15 minutes flash-off (at 20°C/68°F), approximately 50 micron/3 mils: minimum 30 minutes (approx).

The short minimum recoating intervals when overcoated with 4633, 4637, 4641 and 4664 are provided only in case the finished paint system is through dry before exposure to the environment.

If the maximum recoating interval is exceeded, whatever the subsequent coat, roughening of the surface is necessary to ensure optimum intercoat adhesion.

Before recoating after exposure in contaminated environment, irrespective of recoating interval, clean the surface thoroughly e.g. by (high pressure) fresh water hosing and allow to dry.

**Safety:**

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.

This Product Data Sheet supersedes those previously issued. For definition and scope, see explanatory notes to applicable Product Data Sheets.

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