Product Data
Hempadur Avantguard 550

Hempadur Avantguard 550: BASE 1734U: CURING AGENT 97043

Description:	Hempadur Avantguard 550 is a two-component, activated zinc epoxy primer in compliance with the requirements for Level 3, type II in SSPC Paint 20, 2002. Hempadur Avantguard 550 functions as a zinc-rich epoxy featuring a higher mechanical strength.Can utilize ASTM D520, type II zinc dust.
Recommended use:	As a versatile primer for long-term protection of steel in severely corrosive environments.
Features:	• Reduces the effect of corrosion and offers excellent protection • Good mechanical strength, also in cyclic temperatures, with improved crack resistance through high flexibility and self-healing of micro cracks • High tolerance to different climatic conditions (high temperature and humidity) during application, as well as, to high dry film thickness
Service temperature:	Maximum, dry exposure only: 160°C/320°F.
Certificates/Approvals:	Complies with European Fire Standard EN 13501-1; classification B-s1, d0. Complies with EU Directive 2004/42/EC: subcategory j.
Availability:	Part of Group Assortment. Local availability subject to confirmation.

PHYSICAL CONSTANTS:

Shade nos/Colours:	19840 / Dark grey
Finish:	Flat
Volume solids, %:	65 ± 2
Theoretical spreading rate:	10.8 m^2/l [433.1 sq.ft./US gallon] - 60 micron/2.4 mils
Flash point:	29 °C [84.2 °F]
Specific gravity:	1.9 kg/litre [16 lbs/US gallon]
Surface-dry:	10 minute(s) 20°C/68°F
Through-dry:	1.5 hour(s) 20°C/68°F
Fully cured:	7 day(s) 20°C/68°F
VOC content:	325 g/l [2.7 lbs/US gallon]
Shelf life:	1 year for BASE and 3 years (25°C/77°F) for CURING AGENT from time of production.

The physical constants stated are nominal data according to the HEMPEL Group's approved formulas.

APPLICATION DETAILS:

Version, mixed product:	**Hempadur Avantguard 550**
Mixing ratio:	BASE 1734U: CURING AGENT 97043 4 : 1 by volume
Application method:	Airless spray / Air spray / Brush / Roller (see REMARKS overleaf)
Thinner (max.vol.):	08450 (10%) / 08450 (15%) / 08450 (5%)/ 08450 (5%)
Pot life:	3 hour(s) 20°C/68°F
Nozzle orifice:	0.017 - 0.021 "
Nozzle pressure:	220 bar [3190 psi] (Airless spray data are indicative and subject to adjustment) Use filter with minimum mesh size of 250 micron/ 10 mils.
Cleaning of tools:	HEMPEL'S TOOL CLEANER 99610
Indicated film thickness, dry:	60 micron [2.4 mils] see REMARKS overleaf
Indicated film thickness, wet:	90 micron [3.6 mils]
Overcoat interval, min:	see REMARKS overleaf
Overcoat interval, max:	see REMARKS overleaf

Safety: Handle with care. Before and during use, observe all safety labels on packaging and paint containers, consult HEMPEL Safety Data Sheets and follow all local or national safety regulations.

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SURFACE PREPARATION:
Remove oil and grease etc. thoroughly with suitable detergent. Remove salts and other contaminants by high pressure fresh water cleaning. Abrasive blasting to Sa 2½ (ISO 8501-1:2007), SSPC-SP 10/ NACE No. 2, with a sharp-edged surface profile corresponding to Rugotest No. 3, BN10a-b, Keane-Tator Comparator, 3.0 G/S, 2-3 S, or ISO Comparator, Medium (G). (Consult the separate APPLICATION INSTRUCTIONS)

APPLICATION CONDITIONS:
Use only where application and curing can proceed at temperatures above: -10°C/14°F. Maximum application temperature is 40°C/105°F. Maximum relative humidity: 95%. Special attention should be made to the prevailing temperature and RH trend to ensure that conditions are within the acceptable range throughout the application and drying time. The temperature of paint itself should be 15°C/59°F or above. Apply only on a dry and clean surface with a temperature above the dew point to avoid condensation.
In confined spaces provide adequate ventilation during application and drying.

PRECEDING COAT:
None.

SUBSEQUENT COAT:
According to specification.

REMARKS:

VOC - EU Directive 2004/42/EC:

Product	As supplied	15 vol. % thinning	Limit phase II, 2010
1734G19840	325 g/l	404 g/l	500 g/l

For VOC of other shades, please refer to Safety Data Sheet.

Stirring:
Before mixing with the curing agent stir the base thoroughly in order to redisperse any possible settling after storage. After mixing it is equally important to maintain stirring to keep the wet paint as a homogeneous mixture.
This is specifically important in case of a high level of thinning and/or long break in application, where the risk of settlement of zinc particles is the highest.

Application(s):
Additional coats may be required to reach specified film build during brush/roller application and the overcoating times may be extended.

Film thicknesses/thinning:
May be specified in another film thickness than indicated depending on purpose and area of use. This will alter spreading rate and may influence drying time and overcoating interval. Normal range dry is: 40 micron/1.6 mils- 100 micron/4 mils .

Overcoating:
Overcoating intervals related to later conditions of exposure: If the maximum overcoating interval is exceeded, roughening of the surface is necessary to ensure intercoat adhesion.
Before overcoating after exposure in contaminated environment, clean the surface thoroughly with high pressure fresh water hosing and allow drying.

A specification supersedes any guideline overcoat intervals indicated in the table.

Environment	Atmospheric, medium					
Surface temperature:	0°C (32°F)		20°C (68°F)		30°C (86°F)	
	Min	Max	Min	Max	Min	Max
HEMPADUR	2 h	Ext.*	1 h	Ext.*	45 m	Ext.*
HEMPATHANE	2 h	42 d	1 h	14 d	45 m	7 d

NR = Not Recommended, Ext. = Extended, m = minute(s), h = hour(s), d = day(s)

Overcoating note:
According to specification.
***Depending on actual local conditions, the long maximum overcoating intervals may vary. Contact HEMPEL for more information.**
A completely clean surface is mandatory to ensure intercoat adhesion, especially at long overcoating intervals. Any dirt, oil, grease, and other foreign matter must be removed with suitable detergent followed by (high pressure) fresh water cleaning. In addition, scrubbing with a stiff brush may be necessary to remove zinc corrosion products (white rust). If the maximum overcoating interval is exceeded, roughening of the surface is necessary to ensure intercoat adhesion.

Note:
Hempadur Avantguard 550 For professional use only.

ISSUED BY:
HEMPEL A/S 1734G19840