

HEGSEL Corr 280

High-Temperature Corrosion Resistant Coating

Description:

HEGSEL Corr 280 is an advanced coating system having a high temperature anticorrosion capability.

Characteristics:

- 100% solids hybrid ceramic coating offering temperature resistance of +250°C
- Cures fully at ambient temperature
- Self-priming thin film application in one coat
- Outstanding resistance to thermal shock, cycling and abrasion

Applications:

High temperature services, external surfaces of insulated equipment suffering from corrosion, flue gas FGD systems.

Physical Properties:

Continuous Temperature Resistance: 250°C

Intermittent Temperature Resistance: 300°C

Temperature Cycling: Ambient to 250°C 50 cycles - no damage

Salt Spray Test: *ASTM 117* Tested on heat aged samples 1000 hours – no damage

Adhesive Strength: *ASTM D4541* 25 MPa (glue failure)

Compressive Strength BS6319: *Part 2:* 1983 1135 kg cm⁻²

Coating Data:

Finish: Slight texture and semi-gloss

Colours Available: Yellow, Cream and White

Solids Content: 100% by weight

Mixed Viscosity: 32,000 cPoise

Typical Dry Film Thickness: 300-400 microns

Number of Coats: 1

Practical Coverage: Approx. 1.2 m²/kg @ 400 microns DFT

Pot Life at 20°C: 40 minutes

Tack Free/ Drying Time (20°C): 4 hours

Storage Life: 12 months in original tins at 5-30°C

Packaging: 5 kg and 15 kg kits

Specific Gravity: 1.50 gms/cm³

1. Surface preparation

For optimum results the surface should be grit blasted to remove rust and any old coating system before scrubbing with HEGGEL MetalCleaner followed by washing with high-pressure water to remove any surface chemical contamination and soluble salts. Allow the substrate to dry and repeat grit blasting using angular grit to obtain a blast profile of 75 microns and cleanliness of Sa2.5.

Remove residual dust and grit. Once the surface is prepared it should be coated immediately.

2. Mixing

Thorough mixing will give optimum product performance. Ensure product is below 30°C before mixing and always keep material in the shade before, during and after mixing. Mix BASE until smooth and any settled particles are re-suspended. Add catalyst and mix for further 3 minutes. Mixed coating remains usable for a time approximately equal to the pot life i.e. 40 minutes at 20°C, 30 minutes at 30°C and 25 minutes at 40°C. Do not mix more material than can be used within the pot life period.

3. Application Equipment

Brush Grade / Roller:

Natural bristle brush, 3 inches wide and bristles no more than 2 inches long.

Spray:

Single component 70:1 airless spray unit with 32 - 35 thou reversible fluid tip giving 65° spray fan angle. Minimum output fluid pressure at spray tip must be at least 5000 psi.

4. Coating Application

Before coating ensure that the ambient and metal surface temperature is at least 18°C. The ambient temperature must be at least 3°C above the dew point with a relative humidity no higher than 90%. If the temperature of the substrate is below 15°C then external heating may be required to increase the ambient temperature. Stripe-coat all welds before spraying. A total DFT of around 300-400 microns should be achieved. Check regularly the wet film thickness using a wet film thickness gauge. Clean application equipment with xylene, acetone or MEK.

5. Dry Coating QC

Holiday test with high voltage DC tester set at 1500 Volts. Check dry coating thickness using an inductance type electronic dry film thickness tester. Pinholes, misses and thin areas of coating should be identified for repair using a distinctive marker pen. Roughen the defect area as well as surrounding coating for optimum overlap bonding.

6. Cure Schedule

Coating is touch dry after ~ 240 minutes at 20°C. Allow a 5 day ambient cure before putting into service.

7. Dry Film Thickness

The Dry Film Thickness range mentioned in this Technical Datasheet is considered based on typical applications and requirements. However, based on the process conditions and customer requirements, we are able to customize the product that it could be applied in thicknesses other than the mentioned range.

Therefore, we strongly advise a consultation with **HEGGEL GmbH**.

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All information contained herein is based on the current state of our knowledge and practical experience at the time of release. Therefore, please make sure that this is the actual edition of the Technical Data Sheet. All data are only intended as a guideline for informational purposes and do not constitute a legally-binding warranty of the suitability for a certain purpose of use, due to its dependence on site conditions and possible processing, use and applications. All information contained in this technical datasheet is subject to change without notice.

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