

# HEGGEL Corr 230

High-Temperature Advanced Anti-Corrosion Coating

## Description:

**HEGGEL Corr 230** is an advanced coating system having a high temperature anticorrosion capability. Excellent adhesion to both metallic and refractory surfaces.

## Characteristics:

- 100% solids inorganic ceramic anticorrosive coating offering temperature resistance of +550°C
- Thin film application in 1 coat
- Resists salt spray
- Outstanding resistance to thermal shock
- Self-priming
- UV resistant
- Resists thermal cycling

## Applications:

Exhaust vents, stacks, turbines, generators and any structures operating at high temperature.

## Physical Properties:

Continuous Temperature Resistance: 550°C  
Intermittent Temperature Resistance: 600°C  
Temperature Cycling: Ambient to 500°C  
5 cycles - no damage

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

Adhesive Strength: ASTM D4541  
8.3 MPa (cohesive failure)

## Coating Data:

**Finish:** Textured and semi-gloss  
**Colours Available:** White (others available on request)  
**Solids Content:** 100% by weight  
**Viscosity:** 15,000 cPoise  
**Typical Dry Film Thickness:** 200-300 microns  
**Number of Coats:** 1  
**Practical Coverage:** Approx. 1.30 m<sup>2</sup>/kg @ 300 microns DFT  
**Pot Life at 20°C:** 60 minutes  
**Tack Free/ Drying Time (20°C):** 3 hours  
**Storage Life:** 12 months in original tins at 5-30°C  
**Specific Gravity:** 1.5 gms/cm<sup>3</sup>

## 1. Surface Preparation

For optimum results the surface should be grit blasted to remove rust and any old coating system before washing with high-pressure water jetting to remove any surface chemical contamination and soluble salts. Allow the substrate to dry and then grit blast the surface using angular grit to obtain a blast profile no higher than 60 microns (Swedish Standard SA 2.5). 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. 60 minutes at 20°C, 45 minutes at 30°C and 30 minutes at 40°C. Do not mix more material than can be used within the pot life period.

## 3. Application Equipment

### Brush Grade / Roller:

Use a soft natural bristle brush, 3 inches wide and bristles no more than 2 inches Long. If the brush is new then condition by vigorously bending and pulling bristles to remove all loose ones. This is an important step to avoid bristles contaminating the coating during application.

### Spray Grade:

Single component 65:1 airless spray unit with 29 thou reversible fluid tip giving 65° spray fan angle. Minimum output fluid pressure at spray tip must be at least 4000 psi.

## 4. Application

Before coating, ensure that the ambient and metal surface temperature is at least 20°C. The ambient temperature must be at least 3°C above the dew point with a relative humidity below 80%. If the temperature of the substrate is below 20°C then external heating may be required to increase the ambient temperature. Do not apply coating in windy conditions but if time constraints force application in such conditions then enclose equipment to be coated in plastic sheeting. A total DFT of around 200-300 should be achieved. Avoid applying more than 300 microns. Check regularly the wet film thickness using a wet film thickness gauge. After coating the brush or spray equipment should be cleaned with xylene or MEK based thinners.

## 5. Holiday Testing

24 hours after application check the continuity of the applied coating using a wire brush type high voltage holiday detector set at an operating voltage of 800-1000V DC.

## 6. Dry Coating QC

A quantitative measure of the dry coating thickness can be obtained using an inductance type electronic dry film thickness tester. Coating should be repaired if applied 25% below specification. Pinholes, misses and thin areas of coating should be identified for repair using a distinctive marker pen. Repair by roughening the defect area as well as coating surrounding it so that adhesion of the repair to the sound coating is optimum.

## 7. Cure Schedule

Coating is touch dry after ~ 180 minutes at 20°C. Allow a 5-day ambient cure before putting into service.

## 8. 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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