

# HEGSEL® Coat 133

Corrosion Resistant Novolac Epoxy based Coating

*You Build, We Protect!*

**Description:**

**HEGSEL Coat 133** is a solvent-free two-component coating based on advanced Novolac epoxy technology, designed to give high-performance composite coating with excellent corrosion protection ability, chemical resistance and abrasion resistance in highly corrosive environments at elevated temperatures.

**Characteristics:**

- 100% Solid content
- High chemical resistance
- Outstanding adhesion strength
- Single coat curing at ambient temperature
- Temperature resistance up to 170°C
- Resistant against sea water in accordance with ISO 20340

**Applications:**

Pipelines, chemical storage tanks, bio-oils tanks, crude oil and hydrocarbons storage tanks, process vessels with temperature changes, pressure vessels.

**Application Data:**

<b>Mixing Ratio (Parts by Weight)</b>	A : B = 13.5 : 1.5		
<b>Finish</b>	Silk gloss		
<b>Colour</b>	Gray		
<b>Recommended Dry Film Thickness (DFT)</b>	Contact HEGSEL!		
<b>Theoretical Consumption</b>	Approx. 600 g/m <sup>2</sup> @500 microns DFT		
<b>Substrate Temperature</b>	Minimum +10°C and minimum +3°C above dew point		
<b>Material Temperature</b>	Minimum 20°C		
<b>Relative Humidity of Air</b>	Maximum 85 %		
<b>Minimum Coating Thickness</b>	500 microns		
<b>Sagging Limit (At 20°C material temperature)</b>	1000 microns per layer		
<b>Mixing Time</b>	Part A: Stir up by mechanical mixing device Part A+B: Mix up homogeneous. Mixer speed >100 rpm		
<b>Temperature</b>	<b>20°C</b>	<b>30°C</b>	<b>40°C</b>
<b>Pot Life</b>	30 min	20 min	10 min
<b>Curing Time (Fully Cured)</b>	24 hrs	18 hrs	12 hrs
<b>Curing Time (Resistant to Media)</b>	7 days	7 days	5 days
<b>Duration to Overcoat with Itself (In case of longer duration time, the surface must be prepared by blasting)</b>	min.10 hrs max. 24 hrs	min. 6 hrs max. 12 hrs	min. 4 hrs max. 10 hrs

**Note:** All above values are approximate and may be used as a guideline for specifications.

**Technical Data:**

Title	Standard	Value	Unit
<b>Volume Solids</b>	-	100	%
<b>Mixed Density</b>	-	Approx.1.2	g/cm <sup>3</sup>
<b>Adhesion Strength</b>	ISO 4624	> 27	MPa
<b>Abrasion Resistance</b>	ASTM D4060	80	mg loss
<b>Corrosion Resistance (Salt Spray)</b>	ISO 7253	> 10,000	Hrs

**Packaging:**

15 kg kits

**Storage:**

Approx. 24 months, unopened in original drums under dry and cool conditions below 35°C provided with adequate ventilation. Protect from heat and freeze!

## 1. Surface Preparation

The steel surface that is to be coated must be dry and free of mill scale, debris, grease, fat, oil, dust, areas of corrosion / rust as well as other contaminants which may impair the adhesion. Prior to application, all surfaces should be assessed and treated in accordance with ISO 8504:2000. Welding beads must be removed, welding seams and welding overlaps must be smooth in accordance with DIN EN 14879-1.

### Abrasive Blast Cleaning

The surfaces should be prepared by abrasive blast cleaning to minimum SA 2.5 (ISO 8501-1:2007) or SSPC-SP10. Use only approved blasting abrasives with angular grain. Average roughness of  $R_t$  75-100  $\mu\text{m}$  is required. Contact HEGGEL GmbH for further information.

Apply the coating system before steel oxidation is occurred. If oxidation occurs the oxidized area should be reblasted. Defects revealed by the blast cleaning process on substrate should be repaired in an appropriate manner.

Prior to, during and after surface preparation, application and curing the substrate temperature must be minimum  $+3^\circ\text{C}$  above the dew point.

### Concrete Substrates

Refer to HEGGEL GmbH for specific recommendations.

## 2. Application Method

### Airless spraying

Use airless pump with the gear ratio of 1:68 or higher, inlet pressure  $> 6$  bar, tip size: 0.023 - 0.029"; hose length

max.20 m; spray hose diameter max.  $\frac{3}{4}$ ". We recommend the removal of the high-pressure filter and the direct suction of the material without use of a siphon tube.

### Brush / Roller

Using brush/roller is only recommended for small areas, repairs or to precoat edges.

**Note:** Do not use thinners. We recommend to use HEGGEL cleaners to clean and flush equipment.

## 3. Safety Measures

The material safety data sheets of the individual components, the safety instructions on the packing (label) as well as the legal requirements for handling hazardous materials must be observed.

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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 latest 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.

**HEGCEL GmbH**

Huttropstr. 60  
45138 Essen  
Germany

Tel: +49 201 17003 270  
Fax: +49 201 17003 277  
E-Mail: [info@heggel.de](mailto:info@heggel.de)  
Web: [www.heggel.de](http://www.heggel.de)