# HEGGEL® Coat 140

Advanced Epoxy Novolac based Coating



You Build, We Protect!

**Description:** 

**HEGGEL Coat 140** is a two-component special composite coating containing silanized micro particles, based on an advanced hybridized epoxy Novolac resin, providing high chemical and temperature resistance to a wide variety of substrates.

**Characteristics:** 

- · High solid content
- Excellent chemical resistance
- Single coat system
- Temperature resistance up to 150°C (dependent on medium)
- · High corrosion and abrasion protection

**Applications:** 

Internal coating for: Storage tanks for crude oil, hydrocarbons and chemicals, special tanks for urea and bio-oils, biogas and fermenters, process vessels and pipelines for oil and gas.

**Application Data:** 

Mixing Ratio (Parts by Weight)	A:B=4:1				
Mixing Ratio (Parts by Volume)	A:B=3.28:1				
Finish	Glossy				
Colour	Anthracite				
Recommended Dry Film Thickness (DFT)	Contact HEGGEL!				
Theoretical Consumption	Approx. 0.33 kg/m² @250 μm DFT/@ 255 μm WFT				
Number of Coats	One or multiple coats, depending on specification				
Minimum Coating Thickness	250 μm				
Sagging Limit	600 μm per layer at 20°C material temperature				
Mixing Time	Part A: Stir up intensively by mechanical means Part A+B: Mix up homogeneous. Mixer speed >100 rpm				
Material Spray Temperature	Minimum 20°C recommended				
Substrate Temperature	Minimum +10°C and minimum +3°C above dew point				
Relative Humidity of Air	Maximum 85%				
Recoat	Only wet on wet recommended!				
@Temperature	20°C	25°C	30°C	40°C	
Pot Life	30 min	25 min	20 min	15 min	
Curing Time (Fully Cured)	24 hrs	20 hrs	18 hrs	12 hrs	
Curing Time (Resistant to Media)	7 days	4 days	3 days	2 days	

Note 1: Temperature and relative humidity must be measured in the vicinity of the substrate.

Note 2: Waiting time under continuous pressure may reduce pot life!

Note 3: All above values are approximate and may be used as a guideline for specifications.

**Technical Data:** 

Tisto	Ctondond	Value	l lmit	
Title	Standard	Value	Unit	
Mixed Density	-	Approx.1.3	g/cm <sup>3</sup>	
Solids Content	-	98 (±1)	%	
Adhesion Strength on Carbon Steel	ASTM D4541	41	MPa	
Abrasion Resistance	ASTM D4060	48	mg loss	
Flexural Strength	ASTM D790	44	MPa	

Packaging:

12.5 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

All surfaces to be coated should be clean, dry and free from contamination. Prior to application, all surfaces should be assessed and treated in accordance with ISO 8504:2000. Remove weld spatter and smooth weld seams and sharp edges. Oil or grease should be removed according to SSPC-SP1 solvent cleaning.

### **Abrasive Blast Cleaning**

For best adhesion results the surfaces should be prepared by abrasive blast cleaning to minimum SA 2.5 (ISO 8501-1:2007) or SSPC-SP10. A sharp, angular surface profile of  $R_t$  75-100  $\mu m$  is required. Contact HEGGEL GmbH for further information.

The coating system must be applied before oxidation of the steel occurs. If oxidation does occur the entire oxidized area should be reblasted to the standard specified above. Surface defects revealed by the

blast cleaning process should be ground, filled or treated in the appropriate manner.

#### **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: 0.015 - 0.023"; hose length max.15 m; spray hose diameter min. $^{1}/_{2}$ ". 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 recommended for small areas, repairs or to precoat edges. To obtain the required layer thickness, additional coating passes (wet-on-wet) may be necessary.

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

## 3. Safety Measures

Observe the precautionary notices on the container label, and read the Material Safety Data Sheet before use. The product is intended for use by properly qualified professional applicators in industrial conditions. The product is flammable and should be kept away from sparks, open flames, and other sources of ignition. Smoking is prohibited in the application area. Wear suitable respiratory equipment and apply in well ventilated areas. Avoid contact with skin and eyes.

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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.

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