HEGGEL® Coat 102

Surface-Tolerant Ceramic Filled Epoxy Coating

You Build, We Protect!

Description:

HEGGEL Coat 102 is a surface tolerant two component ceramic composite epoxy coating providing outstanding corrosion protection to a variety of metal, fiberglass, reinforced plastic and concrete substrates. Due to a special hardener system the product provides high viscosity.

Characteristics:

- Surface tolerance
- High chemical resistance
- Excellent abrasion resistance
- High-solid content
- Temperature resistance up to 120°C (Dependent on medium)
- 100% resistance against all kinds of hydrocarbons
- 100% resistance against sea water

Application:

Internal and external coating for: Vessels and process tanks, Storage tanks for hydrocarbons, Tubes and pipelines, Offshore and onshore constructions, External applications of all kinds.

Application Data:

Mixing Ratio (Parts by Weight)	A : B = 5 : 1			
Mixing Ratio (Parts by Volume)	A : B = 3 : 1			
Mixing Time	Part A: Stir up intensively by mechanical means Part A+B: Mix up homogeneous. Mixer speed >100 rpm			
Finish	Silk gloss			
Colour	Gray tones, colours on request!			
Material Spray Temperature	Minimum 20°C recommended			
Recommended Dry Film Thickness (DFT)	Contact HEGGEL!			
Number of Coats	One or multiple coats, depending on specification			
Minimum Coating Thickness	150 µm			
Sagging Limits	1000 µm per layer at 20°C material temperature			
Theoretical Consumption	Approx. 0.38 kg/m^2 @250 microns DFT			
Substrate Temperature	Minimum +10°C and minimum +3°C above dew point			
Relative Humidity of Air	Maximum 85%			
@Temperature	**20°C**	**25°C**	**30°C**	**40°C**
Pot Life	≥ 25 min	20 min	15 min	10 min
Curing Time (Fully Cured)	24 hrs	20 hrs	18 hrs	12 hrs
Curing Time (Resistant to Media)	7 days	6 days	5 days	4 days
Recoat (wet on wet)	min. 5 hrs max. 36 hrs	min. 5 hrs max. 36 hrs	min. 3 hrs max. 24 hrs	min. 2 hrs max. 18 hrs

Note 1: All above values are approximate and may be used as a guideline for specifications.

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

Technical Data:

Title	Standard	Value	Unit
Mixed Density	-	Approx. 1.50	g/cm^3
Solids Content	-	Approx. 100	%
Adhesion Strength (on steel)	ASTM D4541	37	MPa
Abrasion Resistance	ASTM D4060	53	mg loss
Flexural Strength	ASTM D790	57	MPa
Shore D Hardness	ASTM D2240	87	-

Packaging:

19.98 kg kits (16.65 kg part A + 3.33 kg part B)

Storage:

Approx. 24 months, unopened in original drums under dry and cool conditions below 35ºC 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.

Preparation Grade

For immersion service, 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 Rt >80 µm is required.
The minimum standard for non-immersion service is SA1 (ISO 8501-1:2007) or SSPC-SP7.
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: 0.017 - 0.020”; 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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