

HEGGEL® Coat 105

Epoxy Protective Coating for Drinking Water Applications

You Build, We Protect!

Description:

HEGGEL Coat 105 is a two-component special composite coating containing silanized high-tech micro-particle reinforcement, based on an ultra-modern A-resin and hardener base especially designed for drinking water applications. **HEGGEL Coat 105** increases the diffusion barrier and thus the corrosion protection and weather resistance, due to its high-quality corrosion protective pigments and inhibitors.

Characteristics:

- Solvent-free
- High corrosion resistance
- Excellent abrasion resistance
- Single coat curing at ambient temperature
- In accordance with DVGW-W270
- In accordance with UBA Coating-Guideline for 23 °C and 60 °C

Applications:

Internal coating for: Storage tanks, Filter tanks e.g., sand filters, Pipelines, further drinking water applications

Application Data:

Mixing Ratio (Parts by Weight)	A : B = 4 : 1		
Mixing Ratio (Parts by Volume)	A : B = 3 : 1		
Finish	Silk gloss		
Colour	Black		
Recommended Dry Film Thickness (DFT)	Contact HEGGEL!		
Theoretical Consumption	Approx. 0.5 kg/m ² @400 microns DFT		
Number of Coats	Single coat application		
Minimum Coating Thickness	400 µm		
Sagging Limits	800 µm per layer at 25°C material temperature		
Mixing Time	Part A: Stir up intensively by mechanical means Part A+B: Mix up homogeneous. Mixer speed >100 rpm		
Substrate Temperature	minimum +10°C and minimum +3°C above dew point		
Relative Humidity of Air	maximum 85%		
Recoat Airless Spraying	Only wet on wet!		
Material Spray Temperature	Minimum 25°C recommended		
@Temperature	20°C	25°C	30°C
Pot Life	-	20 min	12 min
Curing Time (Fully Cured)	48 hrs	36 hrs	24 hrs
Curing Time (Resistant to Media)	7 days	7 days	5 days

Note 1: Waiting time under continuous pressure may reduce pot life!

Note 2: Lower spray temperatures may cause an orange peel effect on the coating surface!

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

Technical Data:

Title	Value	Unit
Mixed Density	1.25	g/cm ³
Solids Content	100	%
Adhesion Strength (on steel) ISO 4624	>20	MPa

Packaging:

15 kg kits (12 kg part A + 3 kg part B)

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. An average surface roughness of R_t 75-100 μm 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. 15m; Spray hose diameter max. 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.

HEGGEL Coat 105 may only come into contact with potable water or food stuff if the coating is fully cured. This has to be ensured by inspection to avoid an impairment of the medium quality.

On putting the tanks / plant components into operation, the DVGW (German Association for Gas and Water) instructions regarding cleaning and disinfection as well as the applicable potable water regulations, in particular §11 "List of treatment agents

and disinfection procedures", must be followed.

Instruction for initial filling

Before first filling with potable water or foodstuffs, wash the coated tanks or pipes with 5 % citric acid and rinse thoroughly.

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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