

HEGSEL Coat 102

2-C- surface tolerant ceramic filled epoxy coating

Description:

HEGSEL 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-sold 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.

Technical data:

Colour	Gray tones, colors on request!
Finish	Silk gloss
Mixing ratio	5 : 1 by weight / 3 : 1 by volume
Density (mix)	Approx. 1.50 g/cm ³
Solids content	Approx. 100%
Adhesion (ASTM D4541)	37 MPa on steel
Abrasion resistance (ASTM D 4060)	53 mg loss
Flexural Strength (ASTM D790)	57 MPa
Chemical resistance	Excellent

Details for application:

Pot life	≥ 25 minutes at 20 °C / 20 minutes at 25 °C / 15 minutes at 30 °C / 10 minutes at 40 °C material temperature <i>*Waiting time under continuous pressure may reduce pot life!</i>
Material spray temperature	Minimum 20 °C recommended
Recommended Dry Film Thickness (DFT)	Contact HEGSEL!
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
Mixing time	Part A: Stirrup intensively by mechanical means Part A+B: Mix up homogeneous. Mixer speed >100 rpm
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 %
Recoat (wet on wet)	At 20°C: min. 5 hrs. / max. 36 hrs. At 25°C: min. 5 hrs. / max. 36 hrs. At 30°C: min. 3 hrs. / max. 24 hrs. At 40°C: min. 2 hrs. / max. 18 hrs.
Curing time, fully cured at 20°C / 25°C / 30°C / 40°C	Approx. 24 hours / 20 hours / 18 hours / 12 hours
Curing time, Resistant to media at 20°C / 25°C / 30°C / 40°C	7 days / 6 days / 5 days / 4 days
**All above values are approximate and may be used as a guideline for specifications.	

Packing:

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

Storage:

Approx. 24 months, unopened in original drums under dry and cool conditions below 35°C provided with adequate ventilation. Please protect against 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. Health and safety

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.

HEGGEL Coat 102; 0.00/25.01.2021. 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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