

HEGSEL Coat 114

2-C-Epoxy-based corrosion protection coating

Descriptions:

HEGSEL Coat 114 is a 2-component high-solids advanced epoxy-based flow coating, cured by polyamine. **HEGSEL Coat 114** provides superior corrosion protection properties to a wide variety of substrates in aggressive environments. It is highly resistant in wet sour gas conditions at different temperature ranges, while demonstrating excellent durability up to 120°C in dry sweet gas services.

Characteristics:

- High volume solids
- Good anticorrosive properties
- Meets API RP 5L2 fourth edition
- Meets the requirements of EN10301
- Reduces the frictional resistance of the inside of steel pipes for the transportation of purified natural gas

Technical data:

Colour	Redbrown
Finish	Glossy
Density (Mix)	1.5 gr/cm ³
Solids content	78 ± 2%
Glass transition temperature (Tg)	16°C
VOC	Directive 1999/13/EC, SED: max. 165.0 g/kg Max. 239.0 g/l

Details for application:

Mixing ratio (base to hardener)	4 : 1 by volume
Recommended Dry Film Thickness (DFT)	50-100 microns. Contact HEGSEL!
Theoretical consumption	96.15 gr/m ² @ 50 microns
Substrate temperature	Minimum +5°C and minimum +3°C above dew point
Temperature during application	Between 5°C and 40°C
Relative humidity of air	Maximum 80 %
Pot life at mixed product temperature of 5°C / 10°C / 20°C / 30°C / 40°C	6 hours / 4 hours / 3 hours / 2 hours / 1 hours
Curing time, dry to touch (up to 75 µm DFT) at 5°C / 10°C / 20°C / 30°C	9 hours / 7 hours / 3.5 hours / 2 hours
Curing time, dry to handle (up to 75 µm DFT) at 5°C / 10°C / 20°C / 30°C	16 hours / 14 hours / 8 hours / 5 hours
Curing time, fully cured (up to 75 µm DFT) at 5°C / 10°C / 20°C / 30°C	21 days / 14 days / 6-7 days / 5 days
Recoat Interval at 20°C	Min: 8 hours / Max: 2 months
All above values are approximate and may be used as a guideline for specifications.	

Storage:

+12 months, unopened in original drums under dry and cool conditions. Please protect against heat and freeze!

1. Surface preparation

All surfaces to be coated should be clean, dry and free from contamination. For best adhesion results, prior to application, steel surfaces should be blast cleaned in accordance with ISO Sa 2½ or SSPC-SP-10, obtained a blast profile of (Rz) 30-80 µm. Remove weld spatter and smooth weld seams and sharp edges.

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.

2. Application method

Stir component A with an electric mixer. In the case of manual mixing, then add component B and mix thoroughly with an electric mixer until a homogeneous mixture is achieved. The temperature of the paint should preferably be above 5°C, otherwise extra thinner may be required to obtain application viscosity. Thinner should be added after mixing the components.

Note: Adding too much thinner results in reduced sag resistance and slower cure.

Application Data	
Visco base	5 - 10 Poise
Visco hardener	3 - 5 Poise
Visco set	4 - 7 Poise
Weight solids	79 ± 2%
Ash content	37 ± 2%
Buchholz hardness	104 ± 10

Airless spraying

- Nozzel pressure: 16.0 - 22.0 MPa (approx. 160 - 220 bar)
- Nozzle orifice: 0.48 - 0.64 mm
- Volume of thinner: 0 - 3% of **HEGGEL Thin 216** depending on required thickness and application conditions.

Brush or roller

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

Maximum DFT achievable by brush or roller is 50 µm. If necessary, it can be thinned with a maximum of 3% **HEGGEL Thin 216**.

Notes:

- Adequate ventilation must be maintained during application and curing. (Refer to corresponding HEGGEL Application Procedure.)
- During the curing period precautions must be taken to avoid contact of the

coating with moisture, otherwise blushing may occur.

- For the purpose of reduction of friction during the transport of gas, it is important to have a smooth finish. Accordingly, the applied DFT needs to be adjusted to the obtained blasting profile. We recommend to apply a nominal DFT which is always at least 20 microns higher than the blasting profile (Rz). ISO 19840:2012 shall be used for the determination of DFT.
- During the curing time coated pipes should be protected against inclement weather conditions such as condensation, rain, fog and snow.
- Use **Cleaner T50** for cleaning tools and equipment.

3. Health and safety

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. As this product includes solvent, care should be taken to avoid inhalation of spray mist or vapor, as well as contact between the wet paint and exposed skin or eyes. Wear suitable respiratory equipment and apply in well ventilated areas.

HEGGEL Coat 114; 0.00/28.09.2022. All information contained herein is based on the current state of our knowledge and practical experience and laboratory tests 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.

HEGGEL GmbH

Huttropstr. 60
45138 Essen
Germany

Tel: +49 201 17003 270
Fax: +49 201 17003 277
E-Mail: info@heggel.de
Web: www.heggel.de