

HEGSEL® Coat 125

Anti-Corrosion Epoxy Based Coating

You Build, We Protect!

Description:

HEGSEL Coat 125 is a two-component epoxy-based coating incorporating advanced bionic technology. It provides superior abrasion resistance and offers outstanding mechanical and chemical resistance, along with excellent corrosion protection. The coating can be applied using airless spray equipment, enabling high-build single-coat application; however, multiple coats can also be applied if required. Its unique formulation eliminates the need for a primer, although an epoxy zinc primer may be used when necessary.

Characteristics:

- Exceptional corrosion protection
- Remarkable adhesion strength
- Suitable for cathodic protection systems
- Inert and harmless once cured
- High impact resistance
- VOC < 2%
- Superior resistance to abrasion
- High chemical resistance
- No shrinkage due to plasticizer migration
- Free from heavy metals, benzyl alcohol, coal tar, anthracene oil, and plasticizers

Application Areas:

HEGSEL Coat 125 is specifically designed to protect steel structures used in hydraulic engineering applications such as flood gates, steel sheet piles, weir systems, industrial and marine structures, offshore platforms, water equipment and storage tanks.

Application Data:

Colour	Silk grey, dusty grey Additional colour options can be made available upon request. Due to variations in raw materials and manufacturing processes, slight differences in colour between batches may occur.		
Mixing Ratio	A : B = 10 : 1 (Parts by weight) A : B = 6 : 1 (Parts by volume)		
Theoretical Consumption	~ 1 kg/m ² @600 microns DFT		
Practical Consumption	~ 1.3 kg/m ² @600 microns DFT Note: The data regarding practical consumption or coverage incorporates an estimated loss of 30%. The practical consumption is subject to specific project conditions and will be determined accordingly to ensure optimal results. We recommend to apply a test area.		
Typical Dry Film Thickness (DFT)	~ 600 -1200 microns (Please consult HEGSEL!)		
Temperature	20 °C	23 °C	30 °C
Pot Life	40 min	30 min	20 min
Temperature	10 °C	23 °C	30 °C
Curing Time (Foot Traffic Load)	24 hrs	12 hrs	6 hrs
Curing Time (Mechanical Load)	48 hrs	24 hrs	12 hrs
Curing Time (Chemical Load)	7 days	5 days	3 days
Overcoat Duration with Itself "Wet to wet" ~ after 15 minutes (with regards to the maximum layer thickness)	7 - 48 hrs max. 3 months	4 - 24 hrs max. 3 months	2 - 12 hrs max. 3 months

Note 1: All the provided values are approximate and should be used as guidelines for specifications.
Note 2: Please note that the 3-month overcoat duration was determined under controlled laboratory conditions. Adequate surface preparation using appropriate equipment is necessary for areas exposed to environmental elements. For further guidance, please consult us!

Technical Data:

Title	Standard	Value
Solids Content	-	100% (volume)
Density (Mix) @ 23 °C	-	~ 1.60 g/cm ³
Viscosity (Mix) @ 23 °C	-	~ 3500 ± 500 mPa.s
Temperature Resistance	-	Dry heat: Up to 100°C continuously Up to 150°C short-term Wet heat: Up to 50°C continuously* Up to 70°C short-term *Please consult HEGSEL.

Packaging:

16.5 kg Pails (15 kg component A + 1.5 kg component B), other sizes are available on request.

Storage:

12 months, in sealed original containers under dry and cool conditions, ideally between 15 – 25 °C. At temperatures below 10°C crystallisation may occur. Protect from heat and freeze!

1. Surface Preparation

The steel surface to be coated must be dry and free from mill scale, debris, grease, oil, dust, rust, and any other contaminants that could hinder adhesion (refer to DIN report 28). Welding beads shall be eliminated and welding seams and overlaps must be smooth as per DIN EN 14879-1. Surface shall be blast-cleaned with tough grit according to DIN EN 12944-4 (ISO 8501-1/-2), reaching preparation grade SA 2.5. Only approved angular-grain blasting abrasives are to be used, aiming for an average roughness R_{Vs} (R_z) \geq 50 microns respectively 'middle (G)' as per DIN EN ISO 8503-2 (ISO 8503-2). In case of uncertainty, surface cleanliness should be tested for soluble contaminants following EN ISO 8502-6 (Bresle method) and EN ISO 8502-9 before coating.

2. Environmental Conditions

Prior to, during, and after application of the coating, ensure that the substrate temperature is at least 3 °C above the dew point and between 10 °C and 40 °C. In addition, the maximum relative humidity shall be below 85%.

The material temperature shall be maintained between 20 °C and 30 °C. A flow heater may be used if necessary.

3. Application Tools

Spray: For an effective application, use airless spray equipment with a minimum pressure ratio of 68:1. The equipment should include a spray hose of approximately 30 m $\frac{3}{8}$ " + 2 m $\frac{1}{4}$ ". The inlet pressure should range between 4 to 7 bar for optimal operation. Additionally, the nozzle size should be between 0.43 - 0.64 mm (0.017" up to 0.025"), and the spraying angle should be adjustable between 30-80° for diverse application needs.

We advise removing the high-pressure filters and pumping the material directly, bypassing the use of a siphon tube.

Note: When working at low temperatures, the use of insulated hoses and a flow

heater is mandatory. If you require a longer spray hose distance (> 30 m) and an independent application time or pot life, we recommend the use of a plural component airless spray equipment.

Brush / Roller: This method is primarily suggested for coating small areas, carrying out repairs, or pre-coating edges. Multiple coatings should be applied until the desired film thickness is achieved. Typically, a film thickness of 250 - 300 microns per coat can be achieved using this procedure.

4. Mixing

To ensure optimal product performance, thorough mixing is essential. Ensure that both the base and hardener components are at least 20 °C before mixing. Gradually incorporate the hardener into the base, using a slow stirring motion with a power mixer (300–400 rpm) for at least 3 minutes to achieve a thoroughly uniform mixture. Transfer the mixture to a clean container and continue mixing for an additional minimum of one minute.

The usability of the mixed material lasts for a duration approximately equal to the pot life.

5. Application

Note: Do not use thinners for this product.

In instances where a primer is needed, consider applying a layer of epoxy zinc primer.

Be aware that under weather exposure, **HEGGEL Coat 125** can exhibit chalking and discoloration. For enhanced durability, we advise using a **HEGGEL Coat 195** or other HEGGEL topcoat at 1 or 2 layers. Please consult HEGGEL!

The aforementioned details are merely recommendations and may be tailored according to the specific conditions of the project.

For cleaning and purging the spray equipment, we recommend using **HEGGEL Cleaners**, ideally at a temperature range of ~ 30 - 40 °C.

Note: The incorporated bionic components form a microfilm on the surface, which may result in a whitish bloom when exposed to moisture. Where higher colour stability is required, the application of a topcoat is recommended.

6. Chemical Resistance

- Industrial and marine conditions
- Water, seawater, brackish water
- Mineral oil, aliphatic hydrocarbons
- Neutral salt solutions
- Diluted acids and alkalis
- Oil, fat, lubricants and fuels

Note: Considering that numerous factors, such as medium, temperature, concentration, and layer thickness, can impact the coating's durability, we strongly advise consulting with us prior to application.

7. Safety Measures

Although **HEGGEL Coat 125** is (nearly) solvent-free, proper ventilation is required when applying it in enclosed areas. Ensure air circulation during and after application until the coating is fully cured. The ventilation system must be designed to ensure that solvent vapour concentrations remain below the lower explosive limit for any solvents that may be present. Avoid inhaling vapours and wear appropriate protective clothing, gloves, eye/face protection, and suitable respiratory equipment. In case of skin contact, wash immediately with soap and water; if in contact with eyes, rinse thoroughly with water and seek medical advice. Do not eat, drink, or smoke during use, and keep away from ignition sources.

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.

HEGGEL Coat 125; Revision No: 0.00 / Last Revision Date: 29.01.2026

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.

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