

# HEGSEL Coat 123

2-C-advanced Novolac-based protective coating

**Description:**

**HEGSEL Coat 123** is a 2-component superior protective coating based on an advanced Novolac-resin, reinforced with micro-ceramic particles. **HEGSEL Coat 123** provides outstanding chemical resistance, corrosion and abrasion protection to a wide variety of substrates in extremely aggressive environments at elevated temperatures.

**Characteristics:**

- Solvent-free
- High chemical resistance
- Excellent abrasion resistance
- Single coat curing at ambient temperature
- Short curing times
- Temperature resistance up to 150°C (dependent on medium)
- ISO 20340 (Performance requirements for protective paint systems for offshore and related structures)

**Application:**

Internal coating for: Various substrates: metals, concrete, plastics, GFK, CFK, storage tanks for crude oil, hydrocarbons, chemicals, special tanks for urea, bio-oils, process vessels, pressure vessels of all kinds, pipelines for oil & gas, bio gas fermenter

**Technical data:**

|                                   |                                      |
|-----------------------------------|--------------------------------------|
| Colour                            | On request!                          |
| Finish                            | Silk gloss                           |
| Mixing ratio                      | 10 : 1 by weight / 6.1 : 1 by volume |
| Density (mix)                     | 1.64 g/cm <sup>3</sup>               |
| Solids content                    | 100%                                 |
| Adhesion (ASTM 4541)              | >24 MPa                              |
| Abrasion resistance (ASTM D 4060) | < 65 mg loss                         |
| Flexural Strength (ASTM D 790)    | 6,900 psi                            |
| Flexural Modulus (ASTM D 790)     | 7.6×10 <sup>5</sup> psi              |
| Corrosion resistance (ISO 7253)   | > 10,000 hours salt spray            |
| Chemical resistance               | Excellent                            |
| Sea water resistance              | ISO 20340                            |
| Solvent resistance                | Excellent                            |

**Details for application:**

|   |  |
|---|--|
| Pot life  | 30 minutes at 20°C / 25 minutes at 25°C / 20 minutes at 30°C / 10 minutes at 40°C material temperature<br>*Waiting time under continuous pressure may reduce pot life! |
| 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   | 400 µm   |
| Sagging limit   | 1000 µm per layer at 20 °C material temperature  |
| Mixing time   | Part A: Stirrup intensively by mechanical means<br>Part A+B: Mix up homogeneous. Mixer speed >100 rpm  |
| Theoretical consumption   | Approx. 0.82 kg/m <sup>2</sup> @500 microns DFT  |
| Substrate temperature   | Minimum +10°C and minimum +3°C above dew point   |
| Relative humidity of air  | Maximum 85 %   |
| Recoat airless spraying (wet on wet)  | At 20°C: min. 10 hrs. / max. 96 hrs.<br>At 25°C: min. 9 hrs. / max. 84 hrs.<br>At 30°C: min. 7 hrs. / max. 72 hrs.<br>At 40°C: min. 5 hrs. / max. 48 hrs.              |
| Curing time, fully cured at 20°C / 25°C / 30°C / 40°C                                 | Approx.<br>24 hours / 20 hours / 18 hours / 12 hours   |
| Curing time, chemical resistant 20°C / 25°C / 30°C / 40°C                             | 7 days / 4 days / 3 days / 2 days  |
| **All above values are approximate and may be used as a guideline for specifications. |  |

**Packing:**

16.5 kg kits

**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.

### 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. A sharp, angular surface profile of  $R_t$  75-100  $\mu$ m 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: 0.019-0.026"; hose length max. 20 m; spray hose diameter max.  $\frac{3}{4}$ ". 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 123; 0.00/18.04.2021. 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.

#### HEGGEL GmbH

Huttropstr. 60  
45138 Essen  
Germany

Tel: +49 201 17003 270  
Fax: +49 201 17003 277  
E-Mail: [info@heggel.de](mailto:info@heggel.de)  
Web: [www.heggel.de](http://www.heggel.de)