HEGGEL[®] Coat 151

Polyurethane Spray Coating



You Build, We Protect!

Description:

HEGGEL Coat 151 is a two-component polyurethane spray coating, coloured. It is resistant to acids and alkalis. **HEGGEL Coat 151** if sprayed in multiple passes on vertical surfaces, it can be built up to a considerable thickness. **HEGGEL Coat 151** has a high resistance to abrasion.

Characteristics:

- Tough-hardSoftener free
- Glossy finish

- Very high chemical resistance
- Very high mechanical resistance
 - Inert and harmless once cured

Applications:

The coating can be used as protection against corrosion, also as a lining for storage containers and tanks that contain dangerous liquids, A III, heating oil EL and diesel oil. It may also be used for the protection of battery trays / racks. and is also suitable for use in wastewater treatment plants.

Application Data:

Mixing Ratio (Parts by Weight)	A : B = 3 : 1		
Mixing Ratio (Parts by Volume)	A : B = 2.5 : 1		
Colour	Grey white (Other colours are available on request)		
Substrate Temperature	min 8°C up to maximum 40°C		
Material Temperature	15 – 20°C		
Maximum Relative Humidity of Air	At 8°C: 75 % (dew point +3°C) At > 23°C: 85 % (dew point +3°C)		
Consumption	Approx. 1.35 kg/m ² per 1 mm, dry film thickness minimum 2 mm on concrete and 0.8 mm on steel.		
@Temperature	8°C	23°C	30°C
Pot Life	-	20 min	-
Curing Time (Foot Traffic)	36 hrs	24 hrs	20 hrs
Curing Time (Mechanical Load)	48 hrs	24 hrs	24 hrs

Note 1: All above values are approximate and may be used as a guideline for specifications.

Note 2: Due to raw material variations and manufacturing techniques, a slight colour / batch difference may occur.

Technical Data:

Title	Value	Unit
Mixed Density (23°C)	Approx. 1.35	g/cm³
Volume Solids	Approx. 100	%
Viscosity (23°C)	Part A: Approx. 2500 ± 500 Part B: Approx. 140	mPas
Shore D - Hardness After 28 days (poured) DIN EN ISO 868	Approx. 65	-
Tensile Strength DIN 53504	Approx. 17	N/mm
Elongation at Break DIN 53504	Approx. 80	%

Packaging:

20 kg kits (15 kg component A + 5 kg component B)

Storage:

6 months, unopened in original drums under dry conditions and a temperature of 15 - 25°C. At temperatures < 15°C crystallisation is possible. Please consult us.

1. Surface Preparation

Concrete:

Prior to the application the substrate must be prepared by mechanical means using qualified equipment e.g. Blastrac shot blasting.

Minimum requirements:

- Free of cement laitance, dust, oil, fat and other contaminants
- Open textured, absorbent surface
- Pull off strength min. 1.5 N/mm²
- Concrete residual moisture max. 4 % Depending on the condition of the substrate the surface must be made non-porous by the application of a primer and / or key coat using HEGGEL POX 410, followed by a light sprinkle of clean, dry quartz sand.

On concrete surfaces where there is rising damp, residual moisture or damp concrete of maximum 6 %, HEGGEL POX 412 must be used.

Once cured, carefully remove excess sand. **Steel:**

Prior to the application the substrate must be prepared by mechanical means using qualified equipment e. g. shot blasting in accordance with DIN ISO 12944-4 Sa 2 ½.

Minimum requirements:

- Free of mil scale, rust, oil, fat and other contaminants
- Stable

See also "general preparation and application instructions" sheet.

2. Application

The temperature of the components must be at least 20°C. Stir the components thoroughly and mix in the correct ratio using a suitable low speed electric mixer (300 -400 rpm) for at least 3 minutes or until a completely homogeneous mixture has been achieved. Put the mixed material into a clean container and mix again for at least 1 minute more. Apply the material by roller / brush or spray equipment in a crosswise manner 2 - 4 coats (wet to wet). Whatever thickness is achieved on the horizontal areas, the same is applicable on the vertical surfaces. Minor defects and faults can be repaired by hand using the same material. Prior to the application the surface must be prepared by grinding. Prior to, during and after the application the temperature of the substrate must be at least +3°C above the current dew point temperature.

HEGGEL Coat 151 can also be applied to substrates that are at minimum temperatures +5°C, however in these conditions the consumption, application and curing will be affected in a negative manner.

3. System Description

The following figures are for ambient and surface temperatures of 15 - 23°C. Both high and low temperatures will influence the filler ratio and the consumption per m².

Concrete:

Primer:

HEGGEL POX 410, clear

Consumption: approx. $0.3 - 0.5 \text{ kg/m}^2$, lightly sprinkle with clean, dry quartz sand $\emptyset 0.4 - 0.8 \text{ mm}$ (approx. 0.5 kg/m^2).

Key coat:

HEGGEL POX 410 + quartz sand

Consumption: approx. 0.6 kg/m² resin plus quartz sand, lightly sprinkle with clean, dry quartz sand \emptyset 0.4 - 0.8 mm (approx. 0.5 kg/m²).

Coating (2 mm):

HEGGEL Coat 151, grey white Consumption: approx. 2.7 - 3 kg/m².

Steel:

Coating:

HEGGEL Coat 151, grey white Consumption: approx. 1.5 - 2 kg/m². Coating thickness for battery trays minimum 1000 μm, 3 - 4 x roller or brush

4. Chemical Resistance

HEGGEL Coat 151 is resistant to acids and alkalis. The system may be used as protection against corrosion, also as a lining for storage containers and tanks that contain dangerous liquids, A III, heating oil EL and diesel oil. It may also be used for the protection of battery trays / racks. The coating is resistant to sulphuric acid (accumulated acid), diesel fuel, diluted acids and alkalis, heating oil EL, fresh water, ground and surface water, mineral oils, diesel fuels, salt water and sewage. It is also resistant to wet temperature max 40°C, short-term and dry temperature max 80°C. The surface of the coating is smooth with a glossy finish. Over a period of time due to the system being exposed to the inclement weather, the coating will start discolouring and chalking. This condition however will not have any negative effect. or compromise the characteristics and integrity of the product.

5. Safety Measures

Avoid inhalation of the vapours and contact with skin. Wear suitable protective clothing, gloves, eye / face protection and suitable equipment. Adequate respiratory ventilation of the working area is recommended. After contact with skin, wash immediately with plenty of water and soap. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. When using do not eat, drink, smoke and keep away from sources of ignition. For additional references to safety-hazard warnings, regulations regarding the transport and waste management please refer to the relevant Safety Data Sheet.

GISCODE: PU 60

6. EU Directive ("Decopaint-RL")

Acc. to the EU Directive 2004/42/EG the maximum allowed content of VOC (Product category AII / j / type SB) is 500 g/l (Limit 2010) for the ready to use product. This product is in accordance with the EU Directive 2010.

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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.

HEGGEL GmbH Huttropstr. 60 45138 Essen Germany Tel: +49 201 17003 270 Fax: +49 201 17003 277 E-Mail: <u>info@heggel.de</u> Web: <u>www.heggel.de</u>