

HEGSEL® Flex 514

Polyurethane Elastic Coating

You Build, We Protect!

Description:

HEGSEL Flex 514 is a two-component polyurethane coating, coloured. VOC < 1 %, practically emission-free, tested acc. to AgBB – scheme. **HEGSEL Flex 514** must always be sealed with a system specific topcoat.

Characteristics:

- Tough-elastic
- Self-levelling
- Crack-bridging (1 - 2 mm static)
- Up to 80 % natural / renewable raw materials
- High chemical resistance
- High mechanical resistance
- Absorbs sound
- Inert and harmless once cured

Applications:

Due to its tough-elastic properties, it is suitable for industrial applications i.e. production plants, offices, supermarkets, showrooms, hospitals and schools. **HEGSEL Flex 514** can be used on concrete, cement screed, magnesia, anhydrite / gypsum, steel, timber and industrial asphalt floors. Please ask for detailed information. With **HEGSEL Flex 514** you can create a flooring system that absorbs sound, is hard-wearing, seamless, hygienic and decorative. **HEGSEL Flex 514** is suitable for public buildings e.g. schools, hospitals, kindergartens, shopping malls and other indoor projects with high requirements to room climate. **HEGSEL Flex 514** has been approved in accordance with the AgBB - scheme for health-related evaluation of emissions from building products used for application indoors.

Application Data:

Mixing Ratio (Parts by Weight)		A : B = 100 : 22 (4.5 : 1)			
Substrate Temperature		Minimum 10°C up to maximum 30°C			
Material Temperature		15°C - 25°C			
Maximum Relative Humidity of Air		At 10°C: 75 % (Dew point +3°C) at > 23°C: 85 % (Dew point +3°C)			
Colour		Pebble grey approx. RAL 7032 Note: Due to raw material variations and manufacturing techniques, a slight colour / batch difference may occur.			
		@Temperature	10°C	23°C	30°C
Curing Time	Accessibility		48 hrs	24 hrs	20 hrs
	Mechanical Load		96 hrs	72 hrs	48 hrs
	Chemical Load		8 days	6 days	5 days
Pot Life (Approx.)			40 min	25 min	15 min

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

Technical Data:

Title	Standard	Value	Unit
Density (23°C)	-	Approx. 1.40	g/cm ³
Volume Solid	-	Approx. 100	%
Viscosity (23°C)	-	Approx. 2500 ± 500	mPas
Shore A - Hardness	DIN EN ISO 868	Approx. 70	
Elongation at Break	DIN 53504	50 - 130 depending on quartz sand filler	%
Fire Resistance	DIN 4102	class 1 (< 50 mm)	
Abrasion (1000 g / 1000 rev.) acc. to Taber with topcoat	-	20	mg

Packaging:

30 kg – Kits

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

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 483**, 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 486 must be used. Please consult us!

Once cured, carefully remove excess sand. See also "general preparation and application instructions" sheet.

2. Application

Prior to mixing, the temperature of the components must be between 15 - 25°C. Mix the components 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. After mixing, fillers can be added whilst stirring constantly. Distribute the mixture immediately onto the surface. **HEGGEL Flex 514** can be applied as a pure product or mixed with clean, dry, tempered quartz sand Ø 0.1 - 0.3 mm. The mixing ratio (w / w) will be determined by the type of use / application. To apply, use a notched trowel (rubber or metal). Spread **HEGGEL Flex 514** as an even coat ensuring uniform thickness. **The freshly applied coating should be finished off with a spiked roller within 5 minutes to achieve an excellent surface and to remove bubbles. This is even more important when filled with quartz sand. In order to improve the optical quality**

(e.g., reddish shades of grey), the fresh coating should be treated with a suitable nylon roller (e.g. 14 mm pile height). 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 Flex 514 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.

Primer:

HEGGEL Pox 483, clear

Consumption: approx. 0.3 - 0.5 kg/m², lightly sprinkle with clean, dry quartz sand Ø 0.4 - 0.8 mm (approx. 0.5 kg/m²).

Pore-sealer:

HEGGEL Flex 514, pebble grey

Consumption: approx. 0.6 - 1.0 kg/m².

Self-levelling coating:

HEGGEL Flex 514, pebble grey

Consumption: approx. 2.0 - 5.0 kg/m².

Topcoats (1 - 2 x depending on use):

HEGGEL Flex 547, clear- silk matt,

Consumption: approx. 120 - 150 g/m² or

HEGGEL Flex 548, pebble grey - silk matt,

Consumption: approx. 120 - 150 g/m².

System thickness: 2 - 4 mm.

Crack-bridging: 1 - 2 mm

N/B:

UV radiation cause discolouration.

N/B:

HEGGEL Flex 514 must always be sealed with a suitable topcoat and a regular maintenance to protect the rubber-like surface against dirt.

Professional maintenance will increase the service life of the flooring system

4. Chemical Resistance

Diesel	short-term
Disinfectants	resistant
Petrol	short-term
Caustic soda 20%	resistant
Sulphuric acid 20 %	resistant
Water	resistant
Aliphatic solvents	short-term
Steel work platforms that vibrate	
Static cracks 1 - 2 mm (0°C / 20°C)	
Wet temperature max. 40°C	
(Please consult us)	

Tested for min. 3 months at 20°C; whether discolouration did occur was not considered.

5. Safety Measures

Wear suitable protective clothing, gloves and eye / face protection. Adequate 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 40

6. EU Directive ("Decopaint-RL")

Acc. to the EU Directive 2004/42/EG the maximum allowed content of VOC (Product category All / 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.

HEGGEL Flex 514; Revision No: 1.10 / Last Revision Date: 11.10.2023

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.

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