

# HEGSEL EP 611

Epoxy resin based wear resistant filler system

**Description:** **HEGSEL EP 611** is a highly wear resistant filler system with hard material fillers based on an epoxy resin.

- Characteristics:**
- Short curing time
  - Highly wear resistant
  - Joint less
  - Overhead application possible
  - Layer thicknesses from 5 mm up to 40 mm
  - Temperature resistance up to +150°C (steel substrates)

**Applications:** **HEGSEL EP 611** is suitable for the manufacture and the repair of wear protective liners, especially in areas which are difficult to access or having complicated geometries. The system is suitable for overhead application.

**Chemical resistance:** Information on the chemical resistance is available on request.

**Substrate:** Components shall be designed and manufactured in accordance with EN 14879-1. Before **HEGSEL EP 611** is applied, the suitability of the surface preparation measures according EN 14879-1 must be checked and recorded.

**Pot life (20°C):**

Product	Time (min)
HEGSEL EP 611	ca. 30

**Curing (20°C):**

Load Capacity	Time
Accessible	ca. 8 hours
First Time Operation	ca. 1 day
Fully Loadable	ca. 5 days

**Packaging:** The products are supplied in the following standard package sizes:

Product	Size	Article No.
HEGSEL EP 611 SOLUTION	4 kg	17763270
HEGSEL EP 611 HARDENER	1.45 kg	17763300
HEGSEL EP 611 UNI	8.4 kg	17762700

**Storage:** The products must be stored in a cool and dry place, away from direct sunlight. At the specified storage temperatures a shelf life of the products is given of at least for the following periods:

Product	Temperature	Shelf Life
HEGSEL EP 611 SOLUTION	≤ +20°C	12 Months
HEGSEL EP 611 HARDENER	≤ +20°C	12 Months

If the storage time is exceeded, the materials must be tested before use. Higher storage and transport temperatures will reduce the shelf life. The containers must be kept tightly closed. Liquid products must be stored frost-proof.

## 1. Surface preparation

**HEGSEL EP 611** is applied on steel or mineral surfaces.

### C-Steel

All contaminants, including non-visible detectable contaminants, must be removed in accordance with DIN Fachbericht # 28 and EN ISO 8502.

Ferretic steel surfaces shall be abrasive blasted to "Near White Metal". A standard preparation degree of SA 2½ according EN ISO 12944-4 and a minimum roughness degree of  $R_z = 70 \mu\text{m}$  must be achieved. To prevent flash rust, the primer must be applied immediately after the blasting and cleaning of the substrate.

### Concrete

Appropriate action shall be taken to prepare the concrete surfaces; dry and free of dust and free of contaminants such as oil or grease. The concrete shall have minimum peel strength of 1.5 MPa. The residual moisture content must not exceed 4%. A mechanical treatment by blasting with solid abrasives, high pressure water blasting or shot blasting is recommended. After milling, flame blasting or prying a blasting is also required.

## 2. Environmental conditions

Environmental conditions	Value
Relative Humidity	$\leq 80\%$
Surface Temperature	$\geq +10^\circ\text{C}$ up to $+30^\circ\text{C}$
Application Temperature	$+20^\circ\text{C} \pm 5^\circ\text{C}$ recommended
Dew Point Distance	min. 3K ( $> 5\text{K}$ at a relative humidity $> 70\%$ )

## 3. Application

**HEGSEL EP 611** is applied on steel or concrete by using a mortar trowel.

## 4. Work tools

The following list of equipment is essential for the application of **HEGSEL EP 611**:

- Stirrer (max. 300 r/min.)
- Measuring cup
- Mixing vessels
- Brushes
- Mortar trowel
- Grouting tool
- Miscellaneous (safety glasses, rubber gloves etc.)

## 5. Mixing ratio

Fill **HEGSEL EP 611 SOLUTION** in a mixing vessel and add **HEGSEL EP 611 HARDENER** at the specified mixing ratio. The stirring of the merged components should be at least 3 minutes and must result in a homogeneous mixture. Then

pour the mixture into a clean pail and mix again briefly.

Primer	Kg	Parts per Weight	Weight per Litre
HEGSEL EP 611 SOLUTION	4.00	100	2.10 Kg
HEGSEL EP 611 HARDENER	1.45	36.25	

## 6. Consumption

Bedding and jointing (Bed Joint 5 mm / Cross Joint 5-7 mm)

Material	Sizes [mm]	Coverage [kg/m <sup>2</sup> ]
Tiles	240 x 115 x 20	ca. 14
Tiles	240 x 115 x 40	ca. 17
Bricks	240 x 115 x 65	ca. 22
Bricks	240 x 115 x 80	ca. 24

## 7. Cleaning

Clean all equipment immediately after use with **HEGSEL EP 611 UNI**. The cleaning is carried out as long as the material is not cured.

## 8. Safety measures

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.

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