

HEGSEL® EP 610

Temperature Resistant Epoxy Resin Based Mortar

You Build, We Protect!

Description: HEGSEL EP 610 is a two-component, high resilient and temperature resistant epoxy resin-based mortar.

Characteristics:

- Resilient at higher temperatures
- Temperature resistance up to +150°C (Steel substrates)

Applications: HEGSEL EP 610 is suitable for bedding and jointing of wear protection materials or for levelling of uneven substrates. The Application on stainless steel or concrete substrates is possible. The application of HEGSEL EP 610 on concrete substrates should only be carried out after the inspection and approval of the HEGSEL Application Technology Department.

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 610 is applied, the suitability of the surface preparation measures according EN 14879-1 must be checked and recorded

Pot life (20°C):

Product	Time
HEGSEL EP 610	Approx. 50 min

Curing (20°C):

Load Capacity	Time
Accessible	Approx. 24 hrs
First Time Operation	Approx. 3 days
Fully Loadable	Approx. 5 days

Packaging:

The products are supplied in the following standard package sizes:

Product	Size
HEGSEL EP 610 Solution	5 kg
HEGSEL EP 610 Hardener	1.8 kg
HEGSEL EP 610 UNI	8.4 kg

Storage:

The materials must be stored at a cool and dry place, protected 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 610 Solution	≤ +20°C	12 Months
HEGSEL EP 610 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 610 is applied on steel or mineral surfaces.

1.1. Carbon 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.

1.2. 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

The specified environmental conditions must be observed during surface preparation and lining work and be tested and recorded according EN 14879.

Environmental Condition	Value
Relative Humidity	≤ 80%
Surface Temperature	≥ +10°C up to +30°C
Application Temperature	+20°C ± 5°C recommended
Dew Point Distance	≥ 3°C (> 5°C at a relative humidity > 70%)

3. Application

HEGSEL EP 610 is applied on steel or concrete by using a mortar trowel and process subsequently with a notched trowel. The wear protection materials must be applied on **HEGSEL EP 610** with a light pressure. The wear protection materials must be clean, dust free, dry and free of substances.

HEGSEL EP 610 is not suitable for the processing of overhanging surfaces without using a supporting structure. The applied materials must be fixed during the curing in the desired position by using appropriate measures.

4. Application Tools

The following tools are essential for the application:

- Stirrer (max. 300 rpm)
- Measuring cup
- Mixing vessels
- Brushes
- Mortar trowel
- Grouting tool
- PSA (safety glasses, rubber gloves etc.)

5. Mixing

Fill **HEGSEL EP 610 Solution** in a mixing vessel and add **HEGSEL EP 610 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.

6. Mixing Ratio

Primer	Parts per Weight	Parts per Liter
HEGSEL EP 610 Solution	100	1.36 kg
HEGSEL EP 610 Hardener	36	

7. Cleaning

Clean all equipment with **HEGSEL EP 610 UNI** immediately after use. The cleaning is done while the material is still 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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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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