

### Epoxy Primer E80FS

- Primer, Adhesive Base, Corrosion Protection -



The Epoxy System E80FS is an unfilled, low-viscous 2-components combination of resin and hardener with good adhesion to several surfaces.

#### Properties and field of application:

- Very good wetting
- Causes tacky-free surfaces
- Osmosis protection, filler for wood pores
- Water barrier layer
  
- **Primer / Adhesion Promoter** for several surfaces:
  - Thermosetting plastics, GRP- or CRP-parts, multiplex panels
  - Wood, plywood sheets (several types)
  - Concrete, brick wall, cement plaster or other surfaces / substrates
  
- **Corrosion Prevention for metal / aluminium (bare)**
  
- Further build-up with
  - Adhesives or laminating resins (epoxy, polyester<sup>1</sup>)
  - coatings (acrylic-, alkyd-, epoxy- or polyurethane-based)

#### Processing data:

Colouring	yellowish / brownish		
Mixing Ratio (by weight)	100 parts resin : 60 parts hardener		
Mixing Ratio (by volume)	100 parts resin : 68 parts hardener		
Mixed Viscosity	low viscous		
Working Time (pot life)	35	minutes	(100g at 20°C)
Gel-time approx.	2-3	h	(0.2mm layer thickness at 23°C)
Earliest sanding after / Tacky-free after <sup>2</sup>	6	h	(0.2mm layer thickness at 23°C)
Working temperature (optimum)	20 - 25 °C		
Working temperature (minimum)	15 °C		

#### Raw material data:

		RESIN	HARDENER	
Viscosity (at 25°C)	[mPa s]	700 - 1100	500 - 1500	HP.07.0003
Density (at 20°C)	[g/cm <sup>3</sup> ]	1.10 - 1.15	1.01 - 1.03	HM.07.0002
(NH)-Equivalent	[g/EQ]		113 - 117	HM.07.0014
Epoxy-Equivalent	[g/EQ]	185 - 195		HM.07.0013

<sup>1</sup>By using polyester-resins, it is recommended to build up a bonding course (see page 3, "application instructions").

## Processing Data:

Surface preparation	Free the surfaces of loose parts, degrease them, sand if necessary and clean again.
Applying methods	Can be applied by means of paint brush, spraying or rollers. This system can be diluted by thinner HP-XB.
Subsequent coats	within 24h / 20°C = without intermediate sanding more than 24h / 20°C = intermediate sanding necessary
Residual moisture ( <i>surface</i> )	Max. 6-8%

	<b>Application on solid, closed to slightly porous surfaces:</b> (e.g. steel, zinc-coated surfaces, bare aluminium, wood...)	<b>Application on porous but solid surfaces:</b> (e.g. concrete, cement, brick walls...)
Dilution (at not less than 20°C)	approx. 3-5% thinner HP-XB	up to 10% thinner HP-XB
Consumption <sup>2</sup>	approx. 100 - 150g/m <sup>2</sup>	approx. 150 - 250g/m <sup>2</sup>

These figures are guideline values - detailed parameter have to be determined by way of trials.

## Safety instructions:

The safety instructions are to be taken from the respective containers as well as the safety data sheets. Do not allow children to handle. Prevent inhalation of fumes and contact with bare skin. Wear suitable protective gloves and safety goggles. Do not eat or smoke when using.

During the hardening process, energy can be released in the form of heat, hence a cooling/heat exchanging should be provided in order to prevent hot spots. Only mix the components in the recommended proportions in accordance with the instructions.

## Application Instructions:

We recommend tests be performed for trials and suitability for the particular type of application. The system should only be used in the mentioned temperature conditions. The relative air humidity should not be above 70%. Clean the surface and remove dirt and dust. Stir up individual components. In respect of the safety instructions the epoxy and hardener should be mixed in a suitable mixing vessel in accordance with characteristics given in the data sheet. Deviating from the mixing recommendations can lead to incomplete hardening and through that to a loss of performance. Ensure that the edges are well mixed using a stirring stick or a propeller type mixer. Streaks indicate insufficient stirring and mixing of the components. Larger amounts (more than 100g) and higher temperatures (higher than 20°C) reduce the pot life.

Mixtures which rise above 40°C in the mixing vessel should not be used any further since curing leads to property losses. Increases in temperature can be reduced by pouring the mixture onto the surface.

Distribute evenly on the surface with the paint roller or rubber slider until a closed layer is formed. If subsequent layers are applied with a time delay (> 24h), the hardened primer must be sanded beforehand. Alternatively, it is necessary to sprinkle sand (<1mm) on the wet surface. Avoid overmuch sanding. This method is also used when coating with polyester resins to improve adhesion.

To achieve an impregnation effect (e.g. on porous substrates such as concrete), add the solvent-based thinner XB to the ready-mixed system at the recommended mixing ratio.

**Attention:** Solvents are flammable. Safety instructions are to be taken from the containers.

### Old paints:

If the old paint coating is intact, we recommend to apply a trial coat beforehand. Non-suitable and non-intact paints must always be removed.

This primer comes without light- and UV-stability. If required, an additional covering layer (e.g. consisting of E40D) must be applied.

Generally for epoxy: Full cure (strength) after 7 days at 20°C (literature value).  
This time can be significantly shortened by tempering.

### Cleaning of work tools:

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Unhardened product remains can be removed from tools by means of acetone or Thinner XB. Tools should be given a good airing after being cleaned with these solvents, in order to prevent the solvent from being retained until the tool is used again in a process. Hardened remains can only be removed by mechanical means, e.g. by sanding.

### Storage:

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Threaded container tops should be kept free of material remains. Do not exchange tops/lids. Close opened containers tightly. Store in a cool and dry place. With optimal storage conditions, shelf-life should be beyond 12 months.

Higher resistance against crystallization.

However, at very low temperatures, a crystallization of the hardener may occur. The process is reversible e.g. by heating it in a water bath to 40-60°C. A complete melting is important. Storage and processing with air admission may lead to carbamate formation (white colouring).

### Deliverable quantities:

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Plastic containers with safety fastening in several quantities.  
Larger containers (e.g. barrels) can be obtained upon request.

### Disposal:

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Do not allow to enter drains, waterways or soil. Uncured product residues are hazardous waste. The cured system is construction site waste / household waste.

### Further Information:

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Further application information can be obtained from our website, by selecting *Product Info* on the homepage. Please do not hesitate to contact us by telephone if you have further queries.

Information presented herein has been compiled from sources considered to be dependable and is accurate and reliable to the best of our knowledge and belief but is not guaranteed to be so. It is the user's responsibility to determine for himself the suitability of any material for a specific purpose and to adopt such safety precautions as may be necessary. We make no warranty as to the results to be obtained in using any material and, since conditions of use are not under our control, we must necessarily disclaim all liability with respect to the use of any material supplied by us. We recommend tests be performed for trials and suitability for the particular type of application.

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