

Epoxi Primer HP-E80FS

- Primer, Adhesion Promoter and Corrosion Protection -

The Epoxy System HP-E80FS is an unfilled, low-viscosity combination of resin and hardener with high adhesion to several surfaces.

Features & Benefits:

- Very good wetting
- Causes tacky-free surface
- Osmosis protection, filler for wooden porosities
- Water barrier layer

- **Primer / Adhesion Promoter** for several surfaces:
 - thermosetting plastics, GRP- or CRP-parts, (melamine) resin plates
 - wood, glulam (timber), plywood (sev. kinds)
 - concrete, brick wall, cement plaster or other surfaces / substrates

- **Corrosion Prevention for metal / aluminium (bare)**

- Further build-up, with
 - adhesives or laminating-resins (epoxy, polyester¹)
 - paints (acrylic-, alkyd-, epoxy- or polyurethane-based)

Product Properties:

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

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

²These informations are approximate values - detailed parameter have to be determined by way of trials.

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.

With the newest printing of this data sheet the previous version loose validity!

Product Specifications:

		RESIN	HARDENER	
Viscosity (at 25°C)	[mPa s]	700 - 1100	500 - 1500	HP.07.0003
Density (at 20°C)	[g/cm³]	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

Processing Data:

Surface preparation	Surfaces must be solid, clean, dry, load-bearing and free of separating materials.
Application methodes	Can be applied by means of paint brush, spraying or rollers. This system can be diluted by thinner HP-XB.
Subsequent coats ²	within 24h / 20°C = without intermediate sanding more than 24h / 20°C = intermediate sanding necessary
Residual moisture (<i>surface</i>)	max. 6-8%

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

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Safety instructions:

The safety instructions are to be taken as being of greatest importance. Do not allow children to handle.

Prevent inhalation of the fumes and contact with the bare skin. Wear approved protective gloves and goggles. If ingested do not eat, drink or smoke.

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%.

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 loss of performance.

Ensure that the edges are well mixed using a stirring stick or a propeller type mixer. Localized signs of hardening indicate insufficient stirring and mixing of the components. Mixing of larger amounts (more than 100g) and higher temperatures (higher than 20°C) reduces the pot life time.

Note: If the temperature in the process go above 40°C then it is not possible to continue further, as the process with lead to a loss of certain characteristics and properties. Increases temperature can be reduced by pouring the mixture into flat painting trays.

Apply the mixes resin with a suitable roller or putty knife. Spread it to a consistent film on foundation.

If the following layers are delayed in applying (more than 24 hours), it is necessary to sand the cured primer. Alternatively, it is necessary to sprinkle sand (<1mm) on the wet surface. Avoid overmuch sanding.

For better penetration of mineralized and wooden foundations add 10% thinner XB. Attention: XB-thinner is a flammable solvent. Observe safety information at current containers.

Old paints:

If the surface is intact, we recommend an adhesion test beforehand. Unsuitable paints in bad order must be remove.

This primer comes without higher light- and uv-stability, It this is desired, there must be applied a several topcoat layer (for example HP-E40D).

Generally for epoxy: Full cure (strength) after 7 days at 20°C (literature value).

Cleaning work tools:

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.

Storage:

Threaded container tops should be kept free of material remains. Do not exchange tops/lids. 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 coloration).

Deliverable quantities:

Plastic containers with safety fastening in several quantities.

- The delivered amounts always contain equal proportions of epoxy and hardener! -
- Larger containers can be obtained upon request.

Disposal:

Do not dispose of through the sewerage system, on areas of open water, or in the soil. Non-hardened remains of the product should be disposed of as hazardous waste. The hardened product waste should be treated as building rubbish or household rubbish.

Further Information:

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.