

**Epoxy Adhesive HP-E120K**

- epoxy glue -

The Epoxy Adhesive System HP-E120K is an unfilled, medium-viscosity combination of resin and hardener with medium reaction time. Processing time (pot life): 120 minutes.

**Features & Benefits:**

- Applicable for metal, wood, rubber, ceramics, rigid foams and many other plastic materials
- Cold-hardening, workable at room-temperature
- Possible to add fillers
  
- For adhesive-joints >1mm, you should add cotton flocks (HP-BF1)
- Medium-reactive epoxy adhesive for high-performance applications

**Product Properties:**

Mix Ratio	100 parts resin : 50 parts hardener (by weight) 100 parts resin : 60 parts hardener (by volume)		
Mixed Viscosity	medium viscous	(details below)	
Working Time (pot life)	120 min	(100g at 20°C or 68°F)	
Minimum hardening time	24 h	(at 20°C or 68°F)	
Full Cure	7 d	(at 20°C or 68°F)	
Working Temperature (optimum)	15 - 25 °C	(64 - 77°F)	

**Product Specifications:**

Viscosity Resin	7000 - 9500	mPa * s	DIN 16945
Viscosity Hardener	ca. 15000	mPa * s	DIN 16945

**Data of Unreinforced Resin / Hardened State:**

Shear strength (steel)	25	N/mm <sup>2</sup>	DIN 53283
Shear strength (ep-laminate)	20	N/mm <sup>2</sup>	DIN 53283
Incipient crack (steel)	4 - 7	N/mm	DIN 53282
E-modulus	2 - 4	kN/mm <sup>2</sup>	DIN 53452
Temperature stability	80	°C	PM.01.008

*Specifications of unfilled sample*

*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!*

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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.

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**Surface Preparation:**

Remove surface contaminants with suited, oil-free solvent cleaner. For many applications it is possible to use acetone. Please note: Some plastics are not resistant to acetone!

Steel or aluminium:

Sandblast or abrade, using clean fine grit abrasives. After that, wipe again with solvents.

Generally note: The surface has to be cleaned before and after abrasion!

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**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 optimum 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 working time. Notably, if the temperature in the process goes above 40°C then it is not possible to continue further, as the process will lead to a loss of certain characteristics and properties. Temperature increases can be reduced by pouring the mixture into flat painting trays.

Apply product evenly to both surfaces to be joined. Fix and keep parts from moving until handling strength is reached. Contact pressure is necessary.

It is possible to add fillers into the mixed adhesive.

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**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 such as grinding tools.

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**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.

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**Deliverable Quantities:**

Plastic containers with safety fastening in the quantities 0.75, 1.5, 7.5, 15 and 45 kg.

- The delivered amounts always contain equal proportions of epoxy and hardener! -

Larger containers can be obtained upon request.

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**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.

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**Further Information:**

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