

Technical Data Sheet – February 2016

## MK EP 600 UN

CHEMICAL NATURE: **EPOXY RESIN**

OPEN TIME: **≈ 90 MIN.**

COLOUR: **OCHRE**

HARDNESS: **> 80 SHORE D**

VISCOSITY: **35.000 – 45.000 MPAS**

**MK EP 600 UN** is a two component epoxy resin (resin + hardener) devoid of fillers recommended for the bonding of different materials.

PROPERTIES	RESIN (PART A)	HARDENER (PART B)
CHEMICAL NATURE	Epoxy Resin	Amine
COLOUR	Whitish	Amber
DENSITY at 25 °C	1,1 – 1,2 g/ml	0,93 – 1 g/ml
VISCOSITY at 25 °C	35.000 – 45.000 mPa.s	35.000 – 45.000 mPa.s
MIXING RATIO BY WEIGHT	100	80
MIXING RATIO BY VOLUME	100	100
TYPICAL CHARACTERISTICS OF THE MIXED PRODUCT		
OPEN TIME at 25 °C	≈ 90 min.	
FIXTURE TIME	300 min.	
FULL CURE TIME	24 hours	
EXOTHERMIC PEAK OF THE REACTION	80 °C	
DENSITY	1,08 – 1,10 g/ml	
HARDNESS	> 80 Shore D	
MINIMUM GAP FILL	0,50 mm	
TENSILE STRENGTH (16h, 40°C) (ISO 53283)	Aluminium: 26 N/mm <sup>2</sup> Steel: 25 N/mm <sup>2</sup> Stainless steel: 22 N/mm <sup>2</sup> Wood: 15 N/mm <sup>2</sup> Ceramic: 15 N/mm <sup>2</sup>	
ELONGATION AT BREAK	< 10 %	
TEMPERATURE RESISTANCE	- 40 / + 75 °C	
WATER RESISTANCE	Good	

### Application & Properties



- Mainly used for bonding of metals (aluminium, steel, iron) and composite materials.
- Suitable for the assembly of rigid plastics, marbles, porcelains, ceramics, stones for jewellery, hard wood, glass and iron.
- Suitable for quick repairs even close to 0°C.
- Solvent-free.
- Good resistance to bases, diluted acids and poor resistance to solvents.
- Resistant to vibration and shock.
- No shrinkage.
- Excellent adhesion on different substrates, without the use of specific surface primer.

### Application



- Hardeners are sensitive to moisture, therefore it is recommended to close the container immediately after use. Add the appropriate amount of hardener to resin and mix thoroughly. For mixing avail of static mixers or manually kneading with a spatula, until complete mixing. The application of the adhesive on the substrate is made by spatula.  
The adhesive, just applied, is sensitive to moisture and carbon dioxide: then cover the joint as soon as possible or harden by the heat.  
The post curing, always recommended to stabilize and give the best features, is necessary when the substrate operates in temperature.

### Recommendations



- Preparation of the substrate.  
  
The substrates must be cleaned well, dry and free from dust oil or grease that can affect the bonding quality.  
For cleaning use isopropyl alcohol, MK SOL-NEO or MK SOLV.13 according to local regulations.  
Degrease PVC, glass and aluminium with an oil-free solvent such as Acetone.  
Check the compatibility of the solvent with the substrate to be bonded.  
If necessary, sandblast or mechanically abrade the surfaces to be bonded.

### Storage & Packaging



- Epoxy resins and related hardeners can be stored for 24 months in their original and tightly closed container keep in a cool and dry place. Hardeners are sensitive to moisture, therefore it is recommended to close the container immediately after use.
- 50 / 200 / 400 ml cartridges + mixers
- 5 KG. Container (Part A) and 4 KG. container (Part B).

### Precautions for use



Mastikol® products are generally quite harmless to handle provided that certain precautions are normally taken when handling chemicals.  
Avoid contact between substances and foodstuffs or food tools, and take all necessary precautions to avoid contact with the skin.  
The wearing of impervious rubber or plastic gloves will normally be necessary; likewise the use of eye protection.  
The skin should be thoroughly cleaned at the end of each working period by washing with soap and warm water. The use of solvents has to be avoided. Disposable paper should be used to dry the skin.  
Adequate ventilation of the working area is recommended.  
These precautions are described in greater detail in the safety data sheet for the individual products and should be referred to for further information.

### Notes



The information and, in particular, the recommendations relating to the application and end-use of Mastikol® products, are given in good faith based on Mastikol®'s current knowledge and experience of the products when properly stored, handled and applied under normal conditions.  
Mastikol® cannot assume responsibility for the results obtained by others over whose methods we have no control.  
It is the user's responsibility to determine suitability for the user's purpose of any production method mentioned herein and to adopt such precautions as may be advisable for the protection of property and of persons against any hazards that may be involved in the handling and use thereof.  
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Users should always refer to the most recent issue of the technical data sheet for the product concerned, copies of which will be supplied on request.