





# MK CA 44 GEL

One-component instant cyanoacrylate adhesive, for fast and high-performance bonding of various materials including rubber, wood, metal, thermoplastics. Spontaneously polymerizes at room temperature and / or with the help of a specific nebulized activator.

## TECHNICAL DATA SHEET - FEBRUARY 2023

TECHNOLOGY	CYANDACRYLATE
VISCOSITY	THIXOTROPIC GEL
NATURE	ETHYL
COLOUR	CLEAR

#### **PROPERTIES**

Technology	Cyanoacrylate
Colour	Clear
Density @ 23°C	1.010 ± 0,05 g/ml
Viscosity @ 23°C	Thixotropic gel
Ideal Substrates	wood, metal, plastic, rubber

### **BONDING SPEED**

Defined as the time required to develop a force of 0.1 N / mm² at 22 °C and 50% relative humidity. The ambient temperature influences the reaction rate in an inversely proportional way.

EPDM	< 5 sec.
Neoprene	< 5 sec.
Nitrile rubber	< 5 sec.
Wood	< 3 sec.
ABS	< 7 sec.
PC	15 ÷ 20 sec.
AISI	10 ÷ 30 sec.

# PERFORMANCE

Tensile strength according to ASTM D412-B

EPDM $2 \div 6 \text{ N/mm}^2$ Neoprene $5 \div 15 \text{ N/mm}^2$ Nitrile rubber $5 \div 15 \text{ N/mm}^2$ 

Shear resistance according to ISO 4587

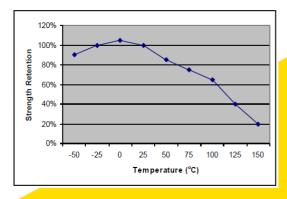
AISI	15 ÷ 25 N/mm²
Aluminium	7 ÷ 10 N/mm²
Nitrile rubber	5 ÷ 10 N/mm²
PC	5 ÷ 10 N/mm²
ABS	6 ÷ 10 N/mm²

#### DESCRIZIONE

MK CA 44 is formulated for the assembly of difficult-to-bond materials that require a uniform distribution of stress and high resistance to loads and tensile / shear stress. The product guarantees the rapid bonding of a wide range of substrates, including metals, plastics and elastomers. The consistency of the gel prevents the adhesive from dripping even on vertical surfaces. Particularly suitable for bonding porous or absorbent materials such as paper, wood, leather and fabric.

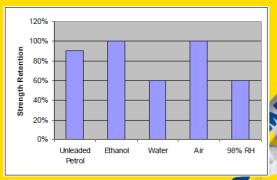
#### TEMPERATURE RESISTANCE

tested on mild steel cured for 24 hours conditioned 1 hour @ 22 ° C before the pull-test



## CHEMICALS RESISTANCE

exposure period of 1000 hours @ 22 ° C exposure with 98% relative humidity @ 42 ° C



#### APPLICATION

- Before proceeding with bonding, prepare the substrates (see paragraph "recommendations")
- Apply the adhesive on one of the two surfaces to be bonded and assemble the components with great care.
- Remove excess glue before it cures.
- Allow the adhesive to react for the time necessary for it to develop sufficient resistance to handling.
- If the curing rate is too slow, use an activator. Allow the activator to dry as long as necessary
- To prevent the product from obstructing the spout, prevent it from coming into contact with the surfaces during dosing.
- The bonded surfaces must be stopped with pliers until they are completely fixed.

## PROPERTIES AND USES

- Used in automotive and OEM for bonding plastic components on thermoplastics.
- For best performance it is recommended to work on clean, dry and degreased surfaces. Apply the product over the entire engaged surface and tighten thoroughly.
- Fast curing.
- Excellent resistance to fatigue, shocks and high loads.
- Good resistance to acids and bases and hydrocarbon solvents
- This product offers the best performance with contained gaps. On passivated metal surfaces use the product in combination with an activator.
- In order to improve bonding on low surface tension plastics, the primer can be applied to the bonding area. Avoid excess primer, let it dry after deposition.

#### RECOMMENDATIONS

Substrate preparation

The substrates must be thoroughly clean, dry and free of oil, grease and dust which can certainly affect the quality of the bonding. Best cleaning by use of isopropyl alcohol MK-WIPES, MK Sol-Neo or MK Sol-13 in accordance with local regulations. Degrease the PVC and metal surfaces with a non-greasy solvent. Always check the compatibility of your solvents with the substrate to be bonded. If necessary, slightly sand or strongly abrade the surfaces to be bonded.

## PRECAUTIONS FOR USE

Mastikol® products should be used following the normally precautions adopted during chemical substances handling. It is recommended to wear rubber or latex gloves and to protect the eyes adequately. Thoroughly clean the skin at the end of the work shift with warm soapy water. The use of solvents is not recommended. Dry yourself with paper wipes. It is recommended to ventilate the work area well. These precautions are detailed in the Safety Data Sheets relating to the individual products and should be referred to for a complete information.

## STORAGE AND PACKAGING

It can be stored for nine months in the original and sealed containers kept in a cool and dry environment.

Storage temperatures must be between 11°C and 23°C. Prolonged storage at a temperature above 23°C will reduce shelf life and the expiration date. Avoid direct contact with sunlight.

Bottles of 10 | 20 | 50 | 500 ml

20 LT Pails | 1.000 LT IBC for industrial usage.

# NOTES

The information, in particular, the recommendations relating to the applications and use of Mastikol® products, are given in good faith and are based on current knowledge and experience of the products, when properly stored, handled and applied under normal conditions. Mastikol® assumes no responsibility for the results obtained by third parties for which there is no control over the method.

It is the customer's responsibility to confirm the suitability of the product for the application. As it is not possible to control the application, use or processing of the products; no liability is assumed in this regard. The customer must ensure that the use of the products does not infringe any third party intellectual property rights. Specifically, Mastikol® disclaims all express or implied warranties, including warranties of merchantability or fitness for specific purposes, arising from the sale or use of Mastikol® products. No liability is accepted for consequential or incidental damages of any kind, including loss of profit.

