

KA&MELOCK KM 12

Elastomer Bonding Agent

DESCRIPTION

KA&MELOCK KM 12 is a versatile heat- activated adhesive that bonds various rubber compounds to metal and plastic substrates. KA&MELOCK KM 12 elastomer bonding agent is a covercoat material designed for use over KA&MELOCK MP 05 primer. This system provides excellent corrosion, temperature and oil resistance.

KA&MELOCK KM 12 bonds elastomer compounds based on natural rubber (NR), butadiene (BR), isoprene (IR), styrene butadiene (SBR), butyl (IIR), nitrile (NBR) and chloroprene (CR) rubber to most metals, alloys and polar polymeric substrates.

Bonding occurs during the vulcanisation of the rubber. Typical cure temperature ranges for moulding processes are 130 - 180 °C. Lower temperatures of around 100 °C with extended cure times of many hours may also be used for tank lining applications

PREPARATION STAGES OF METAL SURFACES BEFORE APPLICATION

The metal surface must be completely cleaned before applying the adhesive. A good preparation of the metal surface is required to obtain a good metal/rubber bond and to be resistant to water and corrosion. The oxide layers on the metal surface should be mechanically cleaned. The metal surface is basically prepared by two methods.

- Mechanical Cleaning:

Grit blasting is a recommended method of metal cleaning. Steel grit is used to blast clean steel, cast iron; for other nonferrous metals, the use of aluminum oxide is recommended.

Layover time between blasting and adhesive application should be kept to a minimum in order to avoid oxidation.

- Chemical Cleaning:

The process of chemically preparing the metal surface requires a different application for each metal group. Phosphating is a widely used chemical process for steel. The process applied under the paint in the aluminum surface coating process is called chromate.

APPLICATION

Mixing - KA&MELOCK KM 20 should be stirred thoroughly before use and during using to keep dispersed solids uniformly suspended.

Applying - Brush, roller, dipping or spraying methods can be applied for KA&MELOCK KM 20.

- Brushing/Roll Coating Undiluted
- Dipping Dilute bonding agent with up to 10% of xylene or toluene.
- Spraying Dilute bonding agent with up to 40 - 60% of xylene or toluene to a viscosity of 18 - 20 seconds (4mm DIN-Cup)

Experience has shown the following thickness of Primer and Bonding Agent provide the best result:

Primer	approx. 8 µm - 10 µm
Bonding Agent	approx. 10 µm - 15 µm

Drying - The bond coating can be dried at least 30 minutes at room temperatures. By using hot air drying up to 70 °C, the time can be shortened. Metal parts with the Primer of Bonding Agent can be stored for several days in a clean environment.

Clean Up - Use xylene or toluene for clean-up.

TECHNICAL DATA*

Colour	Black - Green Liquid
Viscosity 4 mm DIN-Cup	35 - 65 s
Viscosity,cps@25°C(77°F) Brookfield SNB1 Spindle 2, 30 rpm	80 - 300 mPas
Specific Gravity	0,95 - 1,00 g/cm ³
Solid Content	22 - 26 % by weight
Solvents	Xylene

*Data is typical and not to be used for specification purposes.

CAUTIONARY INFORMATION

Before using this product, please refer to the Safety Data Sheet for safe use and handling instructions.

SHELF LIFE / STORAGE

Keep the container tightly closed and away from heat sources. Maximum temperature storage is 25 °C. Shelf life is one year from date of manufacture when stored below 25 °C, unopened container.

ADDITIONAL INFORMATION

For more information on this and other products, please contact us: info@wbkim.com.tr

The above information and recommendations contained are based on our knowledge and experience. Beyond our control due to different materials and conditions of application for our products, processes and applications will be used when appropriate in order to make sure that we strongly advise that adequate testing is performed.