# KA&MELOCK KM 14

**Rubber/Metal-, Rubber/Textile- and Rubber/Rubber-Bonding Agent**

## DESCRIPTION

KA&MELOCK KM 14 is a very universal Bonding Agent for low temperature vulcanization like 90 °C - 100 °C and normal temperature vulcanization (150 °C - 170 °C).

The system with primer KA&MELOCK MP 05 is excellent for tank lining and production of rubber rollers, rubber cylinders etc..

KA&MELOCK KM 14 bond also textile like polyester and polyamide on different rubber types Bromo-/Chlorobutyl Rubber (BIIR/CIIR), Chloroprene Rubber (CR), Chlorosulfonated Polyethylene (CSM), Ethylene Propylene Rubber (EPDM), Butyl Rubber (IIR), Polyisoprene (IR), Nitrile Rubber (NBR), Natural Rubber (NR) and Butadiene-Styrene Copolymer (SBR).

KA&MELOCK KM 14 bond uncured rubber to cured rubber based on Chloroprene Rubber (CR), Chlorosulfonated Polyethylene (CSM), Ethylene Propylene Rubber (EPDM), Butyl Rubber (IIR), Nitrile Rubber (NBR), Natural Rubber (NR), and Butadiene-Styrene Copolymer (SBR).

It is suitable for the production of gaskets.

## 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 14 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 14.

| | |
|---|---|
| • Brushing/Roll Coating | Apply full strength. |
| • Dipping | Dilute bonding agent with up to 20% of xylene or toluene. |
| • Spraying | Dilute bonding agent with up to 30 - 60% of xylene or toluene to a viscosity of 15 - 20 seconds (4mm DIN-Cup) |

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

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|---|---|
| Primer | approx. 8 µm - 10 µm |
| Bonding Agent | approx. 15 µm - 20 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 | **70 - 120 s** |
| Viscosity,cps@25°C(77°F)<br>Brookfield SNB1<br>Spindle 2, 30 rpm | **200 - 600 mPas** |
| Specific Gravity | **0,93 - 0,97 g/cm³** |
| Solid Content | **18 - 22 % 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 ºC. 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