



# KEMAPOX C 6500 AQUA

Water-based final epoxy coating – water-vapour permeable



- ▶ Colours: RAL 7032, RAL 7040 on stock, other colours in accordance with RAL chart on order
- ▶ Increased wear and chemical resistance
- ▶ Water-vapour permeable
- ▶ Basic and final layer in one
- ▶ Mixing ratio: A:B=100:20 (w/w)
- ▶ Temperature resistance of cured product, -30°C to +90 °C
- ▶ VOC-free
- ▶ Excellent adhesion on metal and wood surfaces

**PRODUCT DESCRIPTION** 2-component thin-layer epoxy coating, suitable for floor protection in garages, warehouses, workrooms, etc., onto concrete, magnesite and anhydride substrates. The product in transparent shade is intended for anti-dust protection, which gives a semi-matt effect.

**FIELD OF USE** Fully cured it displays a matt surface, which is water-vapour permeable and easily cleaned. Application in two or three coats, in this case suitable for light mechanical loads. As a third component dry quartz sand, EPOXY SAND, can be used which substantially increases mechanical resistance and is suitable for middle mechanical loads. The product can be ordered in transparent shade. It is also used as a decorative or renovation coating over existing stable ceramic tiles. Suitable also for reservoirs with drinking water.

For final coating of the cement based substrates with higher moisture content, e .g . objects without hydro isolation, ...

- PRODUCT PROPERTIES**
- Colours: RAL 7032, RAL 7040 on stock, other colours in accordance with RAL chart on order
  - Increased wear and chemical resistance
  - Water-vapour permeable
  - Basic and final layer in one
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## PRODUCT DATA

### BASIC INFORMATION

<b>Appearance</b>	Filled epoxy water-based hardener (viscose liquid) and epoxy resin (clear liquid)
<b>Packing</b>	24 kg (20 kg of component A + 4 kg of component B) 6 kg (5 kg component A + 1 kg of component B)
<b>Storage and expiration date</b>	12 months from date of production if stored properly in undamaged original sealed packaging in dry and cool conditions. Date of production is printed on packaging.

### TECHNICAL DATA

<b>Type of product</b>	Epoxy water-based system
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## INSTRUCTIONS FOR USE

**CONSUMPTION** 0,2-0,4 kg/m<sup>2</sup> in single coat

**BASE** The substrate must be clean, dry and free of all contaminants such as dirt, oil, grease, coatings and surface treatments, etc. The concrete substrate must be sound and of sufficient compressive strength (minimum 25 MPa) with a average pull off strength of 1.5 MPa (minimum measured value has to up to 1,0 MPa). Moisture content in substrate has to be up to maximum 8% (CM method, concrete mark MB at least 35).

**BASE PREPARATION** The concrete or screed substrate has to be prepared with appropriate mechanical methods, grinding, sand blasting, cutting,...  
All dust, loose and friable material must be completely removed from surfaces before application of the product, preferably by brush and/or vacuum.

**MIX RATIO** A:B=100:20 (rate of components A and B); Dry quartz sand is add regarding the usage

**MIX TIME** The resin typically is thicker and heavier than the hardener, so they don't always blend together too easily. Before blending, mix the components separately to reduce their viscosity and make them easier to blend. After mixing each component for 2 to 3 minutes, place correctly proportioned amounts of component B in component A. Mix for about 1,5 minutes, scrape the sides and bottom of the bucket, and then mix for another 1,5 min until homogenous mixture is reached. When mixing, move the paddle in a circular pattern with an up-and-down motion. Before use place the mixture in third container and mix again. The third mixing container must be clean and free of dirt, oil, grease, or other contaminants. Additional mixing is not suppose to be very long-time, to prevent too much air bubbles in mixture.

If smaller quantity of mixture is to prepare, use separate mixing container. Before blending, mix the component for 2-3 minutes separately and then place correctly proportioned amounts of each ingredient in a mixing container. The mixing container, must be clean and free of dirt, oil, grease, or other contaminants. For weighing of smaller amounts use digital weighing machine, with precision +/- 0,01 kg.

When third component, dry quartz sand has to be added, mix first A and B considering the proportion and direction for mixing. Then slowly add the aggregate and mix to a uniform consistency. Sand has to be added gradually in steps of 15%. Check with the epoxy manufacturer for aggregate proportions.

**MIX TOOL** KEMAPOX must be thoroughly mixed using a low speed electric stirrer (300 - 400 rpm) or other suitable equipment.

**INSTALLATION** KEMAPOX C 6500 AQUA is used as final epoxy coat and also as supporting layer with adding the quartz sand. In all cases the application is allow onto sufficient prepared substrate. Prior the application confirm substrate moisture content, r.h. and dew point. If < 6% pbw moisture content (also atmospheric condition, dew point and temperature of substrates hat to be suitable), the application can be started.

#### SUBSTRATE PREPARATION - GRINDING

Prior application all other layers substrate has to be very well grind with usage of grinding machine. Before application of next layer the surface has to be well vacuum.

#### IMPREGNATION OF SUBSTRATE

For impregnation and bonding layer use KEMAPOX C 6500 AQUA diluted with 10% of water. Mixed epoxy resin pour onto prepared substrate and with spread equally on substrate with rubber shovel, trowel or roller. After 5 minutes equally spread with paint roller.

#### PIGMENTED FINAL COAT

Final coat can be applied after 10-12 hours after application of impregnation. Mixed epoxy resin pour onto prepared substrate and with spread equally on substrate with rubber shovel, trowel or roller. After 5 minutes equally spread with paint roller.

The second layer is recommended for bright colours for better coverage.

**TOOL** For spreading the steel shovel, paint roller or trowel is to used.

**POT LIFE** 60 minutes, 100 g (at +23°C)

**CLEANING OF TOOL** Clean all tools and application equipment with water immediately after use. Hardened and/or cured material can only be removed mechanically.

## LIMITATIONS

**BASE TEMPERATURE** +10°C min./ +30°C max.

**AIR TEMPERATURE** +10°C min./ +30°C max.

**MATERIAL TEMPERATURE** +15°C min.

- WARNINGS**
- Protect fresh install epoxy resin from freezing, raining and other weather conditions. Use product in temperature more then +10°C.
  - Relative Air Humidity: 80% r.h. max.
  - Maximum moisture content in substrate can be 8% (on concrete with mark MB C30/37, CM method)
  - Store the product in dry place, protected form direct sun and freezing.
  - Freshly applied KEMAPOX resin should be protected from damp, condensation and water for at least 24 hours.
  - For external applications, apply on a falling temperature. If applied during rising temperatures “pin holing” may occur from rising air.
  - If heating is required do not use gas, oil, paraffin or other fossil fuel heaters, these produce large quantities of both CO<sub>2</sub> and H<sub>2</sub>O water vapour, which may adversely affect the finish. For heating use only electric powered warm air blower systems.
  - Dew Point: Beware of condensation! The substrate and uncured floor must be at least 3°C above the dew point to reduce the risk of condensation or blooming on the floor finish.
  - Epoxy resins come in two parts: resin and hardener. The two parts must be mixed in the precise ratio given in the manufacturer's instructions. Imprecise measuring and mixing prevents the epoxy resin from solidifying or curing.

**Recommendation:** Remains of the unhardened/unset material have to be removed in accordance with the legislation.

**Data source:** All technical data in this technical sheet was obtained by laboratory research. Actual data may differ due to different working conditions.

**Local restrictions:** Due to specific local regulations the installed product can differ from country to country. For exact instructions for use a country specific technical sheet should be obtained.

## SAFETY DATA

### EYES AND FACE:

Chemical resistant goggles and face shield must be worn. Examples of eye protection include a chemical safety goggle, or chemical safety goggle in combination with a full face shield when there is a greater risk of splash. Do not wear contact lenses.

### SKIN:

Wear chemical resistant (impervious) gloves.

### RESPIRATORY:

Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

### PROTECTIVE CLOTHING:

If repeated or prolonged skin contact or contamination is likely, protective clothing should be worn.

## LEGAL BASE

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