

TECHNICAL SHEET 07.01.05-EN



TAKRIL Epoxy 2K garage

Two-component epoxy concrete paint

1. Description, Application

TAKRIL Epoxy 2K garage is a two-component, coloured, water-based epoxy topcoat with smooth or nonslip surface. It could be applied on normal to medium load-bearing concrete and cement screed surfaces, such as production areas, warehouses, workshops, production halls, laboratories, sports facilities, commercial facilities etc. The product is suitable for application on non-horizontal mineral surfaces, too. It constitutes coating system with thickness of 0.3 – 0.5 mm if applied in several layers.

Note: It is not intended for usage in the outdoor conditions, directly exposed to sunlight.

2. Colour Shades

Available in 3 shades: RAL 1001, 7032, 7040

3. Technical data

Packaging (component A; component B)	4.5 kg; 0.9 kg	
Density	~1.41 kg/dm ³ (component A) ~1.11 kg/dm ³ (component B)	
Content of vaporous substance (VOC)	<43 g/l	
The EU VOC requirement - category	A/j	
Water dilution mass	~5 %	
Drying time T = +20 °C, relative air humidity = 65 %	Suitable for further treatment	~20 h
	Guaranteed light foot traffic	~24 h
Consumption	~400-500 g/m ² (for a two-coat application)	
Recommended number of layers	2-4	

Characteristics of a dry paint film	Suitable strength to take an average load		~5 days after painting
	Suitable strength for taking on maximum mechanical loads		~10 days after painting
	Vapor permeability EN ISO 7783-2	Coefficient μ	<22000
		value Sd (d = 400 μ m)	<5 m class 3
	Classification according to EN13300	Resistance to wet scrubbing	resistant, class 2
	CO2 diffusion-resistance (EN 1062-6)	Coefficient μ CO2	1700000
		value SdCO2 (d = 100 μ m)	>170
	Water absorption w24 (EN 1062-3)		<0.01
	Water absorption class (EN 1015-18)		class III
	Adhesion to standard concrete (EN 1542)	dry state (before aging)	>2 MPa
dry state (after aging)		>3 MPa	
Slip resistance class (DIN 51130)		R10	

4. Installation Conditions

The air and substrate temperature should not be lower than +10 °C and not higher than +30 °C, the relative air humidity should not exceed 80%, and the moisture content in the substrate should not exceed 6%. The substrate temperature should be at least 3 °C above the dew point temperature!

5. Quality and preparation of the substrate

The surface of the concrete floor must be dry, clean, and free of loosely bonded dust particles, formwork oil residues, grease, and other dirt, etc. The concrete must have a minimum compressive strength of 25 N/mm² and a minimum tensile strength of 1.5 N/mm² (Pull-off test). The moisture content of the substrate at the time of application must be less than 6% by weight (tested with a moisture meter) and free of capillary water rise (tested with polyethylene film).

Before application, the substrate must be mechanically treated (grinding, surface repair, sandblasting) to ensure proper adhesion of the primer. After activating the surface, use a vacuum cleaner to remove dust and loose particles. Cracks must be filled with epoxy adhesive before application. Cement screeds must be equalized with JUKOL Primer (diluted with water in a 1:1 ratio) or paint diluted with water, to achieve lower and more uniform absorbency of the material.

6. Preparation of product and application guidelines

The preparation of the product for use involves mixing measured amounts of component A and component B with an electric mixer. First, component A is mixed for a few minutes, and then component B is added. The A + B mixture is slowly mixed for 2-3 minutes until a homogeneous mixture is obtained.

Smooth surface: Evenly distribute the mixture of components A + B of TAKRIL Epoxy 2K garage over concrete floors that have been pre-treated with a primer JUKOL Primer (diluted with water in a 1:1 ratio) or paint diluted with water (TAKRIL Epoxy 2K garage + 5 wt.% water) using a short-pile (6-10 mm) nylon roller.

Anti-slip surface: Evenly distribute the mixture of components A + B of TAKRIL Epoxy 2K garage over concrete floors that have been pre-treated with a primer JUKOL Primer (diluted with water in a 1:1 ratio) or paint diluted with water (TAKRIL Epoxy 2K garage + 5 wt.% water) using a short-pile (6-10 mm) nylon roller.

Immediately after applying the product, sprinkle the floor with the specified quartz sand (Jubofloor Sand KF 0.2-0.4) to ensure a non-slip surface. Next, remove the excess sand from the cured coating with sandpaper and clean the dust with a vacuum cleaner. Additionally, apply two layers of TAKRIL Epoxy 2K garage with a roller.

Application Requirements:

- at operating temperature +10°C, the open time of the mixture is 60 minutes,
- at operating temperature +20°C, the open time of the mixture is 40 minutes,
- at operating temperature +30°C, the open time of the mixture is 25 minutes.

7. Use of the product in the system

Primer: 1 coat of TAKRIL Epoxy 2K garage + 5% water, applied with a roller; consumption is 0.15 – 0.20 kg/m² per coat.

Topcoat (smooth surface): 1 coat of TAKRIL Epoxy 2K garage applied with a roller; consumption is 0.20 – 0.25 kg/m² per coat.

Topcoat (anti-slip surface): 1 coat of TAKRIL Epoxy 2K garage applied with a roller, consumption 0.20 – 0.25 kg/m² + sprinkling with quartz sand (Jubofloor Sand KF 0.2 – 0.4), consumption 2 – 3 kg/m² + 2 coats of TAKRIL Epoxy 2K garage applied with a roller, consumption 0.20 – 0.25 kg/m² per coat.

NOTE: The product consumption is approximate and depends on factors such as substrate porosity and temperature. If coverage is insufficient, apply an additional layer of material to the substrate. The consumption of TAKRIL Epoxy 2K garage for application on vertical surfaces is 0.15-0.2 kg/m² per layer.

8. Safety and health at work

When working with TAKRIL Epoxy 2K garage, it is important to follow the health and safety measures indicated on the label and safety data sheet. Component B is an irritant to the eyes and skin, while component A is corrosive and can cause skin burns. Adequate ventilation should be provided during use, and protective gloves and a mask should be worn, along with adhering to safety precautions. In case of contact with eyes or skin, rinse immediately with clean water and seek medical attention. Components A and B of TAKRIL Epoxy 2K garage are hazardous to aquatic life and must not be disposed of in the environment. However, the cured epoxy coating is environmentally inert. For additional information, consult the safety data sheet.

9. Storage, Transportation Conditions and Durability

Details concerning transport conditions are stated in the safety sheet.

Storage and transportation in a closed packaging at temperature +10°C to +30°C, protected from the direct sunlight.

Durability when stored in originally sealed and undamaged packaging: at least 18 months.

10. Other Information

Technical instructions in this brochure are given based on our experiences and are given as a guideline for achieving optimal results. We cannot take any responsibility for the damage, caused by incorrect selection of a product, incorrect use or unprofessional work.

Safety measures: Follow the instructions on the safety data sheet of the product.

This technical sheet supplements and replaces all preceding editions. We reserve the right to change and supplement data in the future.

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Repainted surfaces are resistant to the effects of various aggressive liquids for a short or long time
 – see the table below:

Substance	Persistence of the color film under the influence of the medium at T = +20 °C (DIN 53168)			
	1h	1 day	7 days	30 days
Acetic acid, 3%	+	-	-	-
Lactic acid, 5%	+	-	-	-
Tartaric acid, 5%	+	+	+	-
Citric acid, 3%	+	+	+	-
Sulfuric acid, 40%	+	-	-	-
Sodium lye, 20%	+	+	+	+
Sodium chloride, 20%	+	+	+	+
Hydrochloric acid, 10%	+	-	-	-
Gasoline	+	+	+	+
Kerosene	+	+	+	+
Diesel oil	+	+	+	+
Fuel oil	+	+	+	+
Vegetable oil	+	+	+	+
White spirit	+	+	+	+
Brake oil	+	+	-	-

*+ persistent, - non persistent

* In the case of certain shades, the effect of the chemical may cause a change in shade.