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# **Product description**

EP 2K Floor Coating, free from solvent and is designed as glossy, self-levelling coating on mineral substrates (floor coating in workshops, warehouses, and industrial facilities). Can be applied by paint roller or notched trowel.

#### Hardener

0451-370 EP Hardener floor

# Mixing ratio

Paint + hardener 5:1 by weight

#### Pot life

40 - 60 minutes at 20 °C

#### **Dilution**

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# **Application method**

Application method	Thinner	Pressure	Nozzle
See proposed coating structure	-	-	-

### **Processing conditions**

Do not apply at an object temperature below + 10°C or above +30°C.

The substrate temperature must be minimum 3°C above the dew point temperature of the air during the application and drying process (DIN EN ISO 12944-7).

The relative air humidity must not exceed 80%.

Ensure adequate air ventilation.

Application of primer and paint should only be done at constant or decreasing temperatures to reduce the risk of blistering due to air heating in the pores of the substrate. (This also applies to all indoor applications that are exposed to the sun).

# Roller application as self-levelling compound DFT Consumption DFT Consumption 200 - 1000 μm $0.9 - 4.7 \text{ m}^2/\text{l}$ 1000 - 4000 μm $0.2 - 0.9 \text{ m}^2/\text{l}$ $0.7 - 3.3 \text{ m}^2/\text{kg}$ $0.2 - 0.7 \text{ m}^2/\text{kg}$

#### **Drying**

### Object temperature 20 °C

Dust free after 15 - 30 minutes Set to touch after 40 - 60 minutes



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Walkable after 12 hours Recoatable within 24 hours

Fully resistant to mechanical stress and chemical agents after 7 days.

#### **Technical specifications**

Binder base: epoxy resin

Density DIN EN ISO 2811 (kg/l): 1,5 - 1,6 Solids content (% by volume): 87 - 92 Solids content (% by weight): 92 - 95

Delivery viscosity DIN 53211 4 mm (in s): Thixotropic

Gloss level ISO 2813 at 60° (GU): > 80 glossy

Short-term heat resistance: 130 °C Permanent heat resistance: 100 °C

Heat-resistant to damp heat and liquids (water): 40°C

#### **Features**

EU limit value: Category A/j 500 g/l. This product, ready to use as self-levelling compound contains max. 100 g/l.

### **Properties**

Excellent resistance to mechanical stress and chemical agents, highly resistant to abrasion, adapted to fork lift traffic, resistant to patrol, oil and tar, resistant to frost and to de-icing salt, decontaminable, largely resistant to solvents, dilute acids and bases, heat-resistant to damp heat and liquids (water) 40°C, heat resistance: - short-term heat exposure: 130 °C, - permanent heat exposure: 100 °C, adhesion to concrete

#### Storage

At least 2 years in unopened original container

# Substrate preparation

Substrate characteristics:

- mineral substrates (set, dimensionally stable, rough and solid) must be free from friable parts and other substances that may affect the adhesion (e.g. rubber marks, greases, oils, rust, dust and similar)
- The equilibrium moisture content must have been achieved (concrete, cement screed < 4% by weight, anhydrite screed < 0.3% by weight, magnesite floor < 4% by weight).</li>
- The bond strength must be > 1.5 n/mm².
- The compression strength of the substrate must be > 25 N/mm².
- Ensure perfect insulation against earth moisture.

Check for laitance or brittle, non-adherent layers:

- by scratching the surface with a sharp device or a needle at different spots.

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# Result:

brittle layer of approx. 1mm underneath a thin hard surface

#### Repair:

- Remove area mechanically by shot-blasting or milling to a solid substrate.
- Remove area by acid washing (apply a solution of hydrochloric acid (10%), then wash again with clear water) to a solid substrate.

Check for dense concrete surfaces (smooth, hard and almost "shiny"):

- Test the absorbency by scratching and wetting at different spots.

#### Result:

 Only the scrapes become darker (indicates the absorption) and the area around the scratches show no absorption.

#### Repair:

- These dense layers must be removed mechanically by shot-blasting or milling until perfect absorbency is achieved.
- Remove area by acid washing (apply a solution of hydrochloric acid (10%), then wash again with clear water) until perfect absorbency is achieved.

### Oil, grease, wax and residues of soapsuds:

- Wash by using a cleaning agent (do not use products which contain care additives such as wax, silicone, a.s.o.) and repeat the operation if necessary.
- Sometimes deep penetrated substrates are impossible to clean. Remove by milling heavily contaminated areas and renew.

#### The pores have to be open and free of dust:

 Clean the surface by using a powerful industrial vacuum cleaner. This is particularly important when the floor has been treated mechanically.

## Old paintworks:

- Sand slightly well adherent 2K-coatings. Test compatibility (on a sample area).
- Damaged coatings must be removed completely (mechanically or by paint remover).

# **Proposed coating**

Roller application (smooth)

priming coat: Suitable priming coat, for example: 73-135 EP 2K Topcoat glossy (without pigments,

incl.hardener, thinned 1:1 with 0530-440 EP Thinner)

finishing coat: 73-150 EP 2K Floor Coating glossy with 200 - 1000 µm dry film thickness

Note: If the topcoat cannot be applied within 24 hours, the priming coat must be sanded slightly to a matt finish.

roller application (antislip)

priming coat: Suitable priming coat, for example: 73-135 EP 2K Topcoat glossy (without pigments,

incl.hardener, thinned 1:1 with 0530-440 EP Thinner)

finishing coat: 73-150 EP 2K Floor Coating glossy with 200 - 1000 µm dry film thickness



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Note: Scatter quartz sand (consumption: approx.. 1 kg/ m²) on the still wet priming coat. After complete drying, apply the finishing coat 73-150 EP 2K Floor Coating glossy by roller.

as self-levelling compound

priming coat: Suitable priming coat, for example: 73-135 EP 2K Topcoat glossy (without pigments, incl.hardener, thinned 1:1 with 0530-440 EP Thinner)

finishing coat: 73-150 EP 2K Floor Coating glossy with 1000 - 4000 µm dry film thickness

Note: If the subsequent coat can't be applied within 24 hours, the surface must be sanded or just scatter quartz sand (consumption: approx.. 1 kg/ m²) on the still wet priming coat. Remove completely the excess sand by sweeping or vacuuming prior to next workstep.

Pour 73-150 EP 2K Floor Coating glossy already mixed with hardener into another container, add quartz sand observing the mixing ratio: 2:1 by weight. Pour this self-levelling compound on the priming coat and spread it uniformly using a notched trowel. After approx. 20 minutes deaerate the coating using a spike roller.

#### **Processing tips**

For professional use only.

Mix the product with the hardener thoroughly using a low speed electric stirrer (less than 400 RPM). Pour the mixed material in a new clean container and mix again thoroughly. Make sure that both components have been mixed sufficiently - if not, this could result in staining.

Weathering causes after a relatively short time chalking and colour changes. Chalking is not detrimental to the resistance of the coating. Re-coating with 72-162 AC 2K Topcaot RB semi-gloss may protect against chalking and colour changes.

Scattering quartz sand on the surface creates an anti-slip coating.

Blister can be avoided during the application by thoroughly priming and processing at decreasing temperature.

During curing, protect coating from humidity (fog, rain). High air humidity and low temperatures may cause clouding on the surface. This effect may lead to intermediate adhesion problems and must therefore be removed before recoating by means of wash water (water and washing-up liquid). Deaerate the still flowing coating by means of a spike roller.

To minimize shrinkage (e.g. when pre-filling damages such as cracks and gaps larger than 5 mm) just add quartz sand.

When adding 0530-440 EP Thinner the solvent smell can increase.

Check colour shade prior to application.

The pot life depends on the mass/volume – the higher the mass the shorter the pot life; higher temperatures reduce and lower temperatures extent the pot life. The product must not cross-link in a plastic container (development of heat during the curing in thick layers).

#### Cleaning of tools

Clean tools immediately after use with 0530-440 EP Thinner.