



## Technical Data Sheet

### EPOLUX FLOOR 640

#### Product Description

EPOLUX FLOOR 640 is a colored, 2 components, and solvent-free epoxy system for creating self-levelling floors. It is classified as SR-B2,0-AR0,5-IR4, according to the EN 13813 standard.

#### Intended Use

EPOLUX FLOOR 640 is used for coating cement-based floors with high demands for mechanical or chemical resistance. It offers great toughness, high durability against abrasion and chemicals (alkalis, dilute acids, water, mineral oils and several solvents). It is suitable for industrial areas, small industries, warehouses, department stores, hotels, garages, high traffic areas, cars repair shops, etc.

#### Technical Data

<b>Gloss level (GU 60 °)</b>	Gloss (>80 GU)
<b>Density</b>	1,35 gr/ml
<b>Mixing Ratio per weight</b>	100A:35B
<b>Pot Life</b>	about 40 min in 23°C
<b>Substrate Temperature</b>	+12°C to +35°C
<b>Ambient Temperature</b>	+12°C to +35°C
<b>Substrate Humidity Content</b>	<4%
<b>Relative Atmospheric Humidity</b>	<70%
<b>Hardening Time (23°C)</b>	about 10 h in 23°C
<b>Overcoating</b>	after 24 h in 23°C
<b>Walkability</b>	after 24 h in 23°C
<b>Complete Hardness</b>	7 days
<b>Hardness (Shore D, ASTM 2240)</b>	80
<b>Abrasion Resistance (ASTM D 4060 TABER TEST, in proportion 1:1 to CS 10/1000/1000)</b>	72 mg

<b>Compressive Strength (DIN 53452)</b>	103 N/mm <sup>2</sup>
<b>Flexural Strength (DIN 53452)</b>	68 N/mm <sup>2</sup>
<b>Impact Strength (EN ISO 6272)</b>	IR4
<b>Adhesion Strength (EN 13892-8)</b>	≥ 2,5 N/mm <sup>2</sup> (concrete breaking)
<b>Colors</b>	RAL 7035, RAL 7040 (grey) RAL 3009 (maroon) RAL 1015 (beige) Other colors available after order

### **Substrate Preparation**

The surface must be dry, clean, stable, free from materials that prevent adhesion, such as dust, loose materials, grease etc. and protected against rising humidity.

The following specifications must be kept:

Concrete quality: at least C20/25

Floor mortar quality: cement content at 350 Kg/m<sup>3</sup>

Aging: at least 28 days

Substrate humidity content < 4%

Depending on the nature of the substrate, appropriate pre-treatment should be performed, such as brushing, grinding, sandblasting, water blasting, shot blasting, etc. Then, the surface should be cleaned from dust with a high suction vacuum cleaner.

### **Application**

#### **Primer Application**

Priming must be applied using EPOPRIMER 241 in one layer by roller or brush (2 layers required in case of increasingly porous substrate)

Consumption: 200-300 g/m<sup>2</sup>.

After priming application plastering must be administered locally with a mix of EPOLUX FLOOR 640 and quartz sand, in proportions of 1:2 to 1:3 per weight.

EPOLUX FLOOR 640 application must be done within 24 hours from the time primer is administered. In case that it is about to be applied after the 24 hours time limit, trampling of the surface must be done using quartz sand M32. After the primer's hardening, non-attached grains of sand must be removed with a high-absorbency vacuum cleaner.



When the substrate is wet (humidity bigger than 4%) or the floor is a new concrete based floor (3-28 days) surface must be primed with epoxy water-based primer EPOPRIMER 241AQ.

### **Final Coating Mix**

Components A & B are packed in dispensers with predetermined mixing ratio. Component A is stirred for one minute before mixing. Then, Component B is fully added to Component A. Mixing both components lasts about 3 minutes using a low-speed drill (300rpm). It is important that mixing is applied to the walls and the bottom of the dispenser as well, for component B to be evenly distributed. After that, quartz sand M32 is added with continuous stirring, with the mixing ratio of EPOLUX FLOOR 640 to quartz sand being 1:0,8-1:1,2 per weight and must be stirred for 3 minutes until the mixture is evenly distributed.

### **Self-levelling Coat Application**

Depending on the form of the final surface:

#### For a smooth surface

The mixture must be applied by pulling with a notched trowel to a thickness of 2-3mm.

EPOLUX FLOOR 640 Consumption (A+B): 0,6 Kg/m<sup>2</sup>/mm.

Quartz Sand Consumption: 1,2 Kg/m<sup>2</sup>/mm.

To release the trapped air in the applied self-levelling coating, a special pin roller must firstly be applied to the surface.

#### For a non-slippery surface

Mixture is applied as in the case of a smooth surface. Trampling of the still wet surface using quartz sand M32 is required, accordingly to the desirable non-slippery result.

Quartz sand Consumption: about 3 Kg/m<sup>2</sup>

After the hardening of EPOLUX FLOOR 640, non-attached grains of sand must be removed with a high-absorbency vacuum cleaner. A final sealing layer of EPOLUX FLOOR 640 must be applied.

Consumption: 400-600 g/m<sup>2</sup>.

### **Painting Application**

Depending on the form of the final surface:

#### For a smooth surface

A+B mixture is applied by roller in two layers. The second layer is applied when the first one dries, but within 24 hours from the initial application.

EPOLUX FLOOR 640 Consumption (A+B): 0.250-0.300 Kg/m<sup>2</sup>

#### For a non-slippery surface

Mixture is applied as in the case of a smooth surface.

EPOLUX FLOOR 640 Consumption (A+B): 0.250-0.300 Kg/m<sup>2</sup>



Trampling of the still wet surface using quartz sand M32 is required, accordingly to the desirable non-slippery result.

Quartz sand Consumption: about 3 Kg/m<sup>2</sup>.

After the hardening of EPOLUX FLOOR 640, non-attached grains of sand must be removed with a high-absorbency vacuum cleaner. A final sealing layer of EPOLUX FLOOR 640 must be applied.

Consumption: 400-600 g/m<sup>2</sup>.

### **Cleaning equipment**

Exactly after application using 809 solvent.

### **Packaging**

10Kg A and 3,5Kg B (predetermined mixing ratio)

### **Storage**

12 months in the initial sealed package, in area protected against humidity and solar radiation. Recommended storage temperature from +5°C to +35°C.

### **Remarks**

-Low temperature or humidity may prolong hardening time, whereas high temperature may reduce it.

-Application must be done at least 4 weeks after the construction of the new mortar floor.

-Exposing the layering to ultraviolet radiation may cause the phenomena of chalking and fading of colors over time.

-Immediate application of the mixture after mixing is recommended in order to avoid high temperatures and its polymerization in the dispenser.

-Substrate must be at least 3°C over dew point in order to reduce the risk of condensation or the creation of bubbles in the surface's finishing.

### **Safety**

Handle with care. Before and during use, observe all safety labels on packaging and paint containers, consult TETRALUX Safety Data Sheets and follow all local or national safety regulations.