

**CP-Synthofloor 8463** is a 2-component epoxy coating, colored free of nonylphenol



**DESCRIPTION**

- tough-hard
- self-levelling
- self-ventilating
- can be filled with quartz sand (30 up to 50 %)
- very high chemical resistance
- very high mechanical resistance
- high abrasion resistance
- inert and harmless once cured

**RESISTANCE**

- water / sewage
- washing agents / detergents
- saline solutions
- solvents (please consult us)
- diluted acids and alkalis
- lubricants and fuels
- wet temperature max. 40 °C
- wet temperature short-term max. 60°C



**APPLICATION**

**CP-Synthofloor 8463** is an economical industrial floor coating for production plants, sales areas and warehouses. Different specifications can be formulated by the addition of fillers.

Due to the self-levelling properties of this product, it is easy to apply. Used in conjunction with CP-primers and CP-topcoats, it is possible on cementitious substrates to create a quality and highly aesthetic flooring system, which has a high chemical and mechanical resistance (choice of topcoats available on request).

**CP-Synthofloor 8463** is highly suitable for both self-levelling and wear coating systems.

**TECHNICAL DATA**

Mixing ratio A : B	100 : 20 by weight (5 : 1)
Density (23 °C)	approx. 1.60 g/cm <sup>3</sup>
Volume solids	approx. 100 %
Viscosity (23 °C)	approx. 1500 mPa·s ± 300
Compressive strength (DIN EN ISO 604)	> 60 N/mm <sup>2</sup>
Shore D - hardness (DIN EN ISO 868)	approx. 78
Tensile strength (DIN EN ISO 178)	45 N/mm <sup>2</sup>
Linear shrinkage	< 0.12 %
Abrasion (1000 g / 1000 rev.) acc. to Taber	45 mg
Color	pebble grey approx. RAL 7032 (other colours are available on request) - due to raw material variations and manufacturing techniques, a slight colour / batch difference may occur -

**APPLICATION DATA**

Pot life (12 °C / 23 °C / 30 °C)	approx. 60 minutes / 30 minutes / 20 minutes
Substrate temperature	minimum 12 °C up to maximum 30 °C
Material temperature	15 °C - 25 °C
Maximum relative humidity of air	at 12 °C: 75 % (dew point + 3 °C) at > 23 °C: 85 % (dew point + 3 °C)
Duration between applications (if sprinkled with quartz sand, the duration will increase)	10 °C: min. 24 hours / max. 36 hours 23 °C: min. 12 hours / max. 24 hours 30 °C: min. 6 hours / max. 24 hours
Curing time / foot traffic (12 °C / 23 °C / 30 °C)	36 hours / 24 hours / 16 hours
Curing time / mech. resistance (12 °C / 23 °C / 30 °C)	96 hours / 48 hours / 24 hours
Curing time / chem. resistance (12 °C / 23 °C / 30 °C)	7 days / 5 days / 2 days
Consumption	1.8 - 5.0 kg/m <sup>2</sup> , additional filling with e.g. quartz sand Ø 0.1 - 0.3 mm is possible.

All above values are approximate and may be used as a guideline for specifications.

**PACKAGING AND STORAGE**

12 months, closed in original drums under dry conditions and a temperature of 15 - 25 °C. At temperatures < 10 °C crystallisation may occur. Please consult us.

Packaging	30 kg – pails
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**QUALITY ASSURANCE AND INSPECTION**

To ensure a continuous quality of the product, the quality assurance and inspection plan of Chesterton International GmbH has to be considered. Recommendations for qualified test control units are also available.

**HEALTH AND SAFETY**

Observe the precautionary notices on the container label, and read the Material Safety Data Sheet before use. The product is intended for use by properly qualified professional applicators in industrial conditions. The product is flammable and should be kept away from sparks, open flames, and other sources of ignition. Smoking is prohibited in the application area. Wear suitable respiratory equipment and apply in well ventilated areas. Avoid contact with skin and eyes.

**DISCLAIMER**

All technical information in this Product Data Sheet is signified as material description and based on laboratory tests and practical experiences under normal conditions. During individual use, actual measured data may vary due to circumstances beyond our control. In particular, the recommendations regarding the application and use require the proper storage and treatment of our products. Due to differences in materials, substrates and real site conditions Chesterton International GmbH does not assume any warranty or liability for application results or fitness for a particular purpose, of any legal relationship whatsoever, neither from this information, nor from any given recommendations, or from any other oral advice. The user of the product must check the product’s suitability for the intended application and purpose. Chesterton International reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our general terms and conditions of sale and delivery. The most recent issue of the Product Data Sheet has to be considered, please ask always for the current version.

## 1. SURFACE PREPARATION

Prior to the application the substrate must be prepared by mechanical means using qualified equipment e.g. Blastrac® shot blasting.

*Minimum requirements:*

- free of cement laitance, dust, oil, fat and other contaminants
- open textured, absorbent surface
- pull off strength min. 1.5 N/mm<sup>2</sup>
- concrete residual moisture max. 4 %

Depending on the condition of the substrate the surface must be made non-porous by the application of a primer and / or key coat using **CP-Synthofloor 8002**, followed by a lightsprinkle of clean, dry quartz sand Ø 0.1 - 0.3 mm. *On concrete surfaces where there is rising damp, residual moisture or damp concrete of maximum 6 %, CP-Synthofloor 8010 must be used.* Once cured, carefully remove excess sand. See also "general preparation and application instructions" sheet.

## 2. APPLICATION

Prior to mixing, the temperature of the components must be between 15 - 25 °C. Mix the components in the correct ratio using a suitable low speed electric mixer (300 - 400 rpm) for at least 3 minutes or until a completely homogeneous mixture has been achieved. Put the mixed material into a clean container and mix again for at least 1 minute more. After mixing, fillers can be added whilst stirring constantly. Distribute the mixture immediately onto the surface. **CP-Synthofloor 8463** can be applied as a pure product or mixed with clean, dry, tempered quartz sand Ø 0.1 - 0.3 mm. The mixing ratio (w/w) will be determined by the type of use / application. To apply use a notched trowel (rubber or metal).

Spread **CP-Synthofloor 8463** as an even coat ensuring uniform thickness. The freshly applied coating should be finished off with a spiked roller within 5 minutes to achieve an excellent surface and to remove bubbles. This is even more important when filled with quartz sand. In order to improve the optical quality (e.g. reddish shades of grey), the fresh coating should be treated with a suitable nylon roller (e.g. 14 mm pile height). Prior to, during and after the application the temperature of the substrate must be at least +3°C above the current dew point temperature.

## 3. SYSTEM DESCRIPTION

The following figures are for ambient and surface temperatures of 15 - 23 °C. Both high and low temperatures will influence the filler ratio and the consumption per m<sup>2</sup>.

**Primer: CP-Synthofloor 8002**, clear; Consumption: approx. 0.3 - 0.5 kg/m<sup>2</sup>, lightly sprinkle with clean, dry quartz sand Ø 0.4 - 0.8 mm (approx. 0.5 kg/m<sup>2</sup>).

**Key coat: CP-Synthofloor 8002+** quartz sand; Consumption: approx. 0.6 kg/m<sup>2</sup> resin plus quartz sand, lightly sprinkle with clean, dry quartz sand Ø 0.4 - 0.8 mm (approx. 0.5 kg/m<sup>2</sup>).

**Coating: CP-Synthofloor 8463**, pebble grey; Consumption: approx. 1.8 - 5.0 kg/m<sup>2</sup>. System thickness: 2-3 mm.

By using both the clear and pigmented polyurethane topcoats it is possible to modify the aesthetic finish e.g. silk matt, glossy, smooth and anti-slip. Topcoats also improve both the chemical and mechanical resistance (please consult us).

Professional maintenance will increase the service life of the flooring system.

N/B: UV radiation cause discolouration.

## 4. CHEMICAL RESISTANCE

Acetic acid 5 %	resistant	Formic acid 2 %	resistant	Phosphoric acid 25 %	resistant
Acetic acid 10 %	short-term	Formic acid 5 %	short-term	Saline solution	resistant
Ammonia 5 %	resistant	Hydrochloric acid 5 %	resistant	Sodium lye 50 %	resistant
Boric acid 4 %	resistant	Hydrochloric acid 30 %	short-term	Sulphuric acid 5 %	short-term
Citric acid < 10 %	resistant	Lactic acid 10 %	resistant	Tannic acid solution	resistant
Chlorine bleach 6 %	resistant	Methylene chloride	not resistant	Xylene	resistant
Distilled water	resistant	Nitric acid 5 %	resistant		
Formaldehyde 37 %	resistant	Petrol / Super	resistant		

Tested for min. 4 months at 20 °C; whether discolouration did occur was not considered.

## 5. PACKAGING

30 kg - sets

25 kg - component A

5 kg - component B

## 5. HEALTH AND SAFETY

**GISCODE: RE 1** Avoid inhalation of the vapours and contact with skin. Wear suitable protective clothing, gloves and eye / face protection.

Adequate ventilation of the working area is recommended. After contact with skin, wash immediately with plenty of water and soap. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. When using do not eat, drink, smoke and keep away from sources of ignition. For additional references to safety-hazard warnings, regulations regarding the transport and waste management please refer to the relevant Material Safety Data Sheet.

## 6. EU DIRECTIVE ("DECOPAINT-RL")

Acc. to the EU Directive 2004/42/EG the maximum allowed content of VOC (Product category All / j / type WB) is 500 g/l (Limit 2010) for the ready to use product. This product is in accordance with the EU Directive 2010.