



PENTACEM MICRO 5

**Composite microcement for the realization of artistic areas
(medium grain size)**

Technical Data Sheet July 2015

DESCRIPTION

Pentacem Micro 5 is a two-component cement based product for professional use, used to create continuous surfaces of high technical and artistic quality. In a short time, it allows to create floorings, walls and ceilings with unique and personalized artistic effects, that each operator can easily realize.

PREPARATION AND APPLICATION

The mixture should be prepared *in situ* with a drill mixer, by adding to **Pentacem Micro 5** a quantity of resin variable from 25% to 28%, depending on the desired consistency. It should be mixed until obtaining a homogeneous mixture free of lumps (for about 2 minutes). **Pentacem Micro 5** is normally used as a first coat for the preparation of further finishing applications with **Pentacem Micro 3** or **Pentacem R3**. It's possible to apply more coats of **Pentacem Micro 5** when a bigger thickness is required. Moreover, depending on the desired effect, it can be used also as a final coat. The standard form of **Pentacem Micro 5** is white, but it is possible to get the desired colors and shades by adding standard pigments for cement to the mixture. To realize floors and wall coverings, the product should be applied with an american trowel in stainless steel, taking care to uniformly spread each coat of the mortar. For the first coat, the fiber-reinforced versions **Pentacem Micro 5 F** or **Pentacem Micro R5 F** are recommended, in order to prevent the formation of cracks, especially during hot weather. Each coat can be sanded dry, both between one layer and another, or only the final coat, by using a standard mono sandpaper brush or sanding or polishing machines, depending on the desired final effect. When the final layer of **Pentacem Micro** has dried, it's advisable to treat the surface with **Pentaresin MM11** to improve the surface resistance to wear. For vertical applications it is possible to use **Pentaresin S4** or **Pentaresin PU 14** polyurethane in *aqueous solution*, in order to obtain "a silky effect" to the touch.

TECHNICAL DATA

	Pentacem Micro 5	Pentacem Micro R5
Version	Normal setting time	Accelerated setting time
State:	Powder	Powder
Colour:	White	White
Max. granulometry Ø :	0.5 mm	0.5 mm
Ratio mortar/resin :	100 : 27	100 : 27
Min. thickness :	0.5 mm	0.5 mm
Mixing time at 20 ± 2°C:	40 – 60 m	30 – 40 m
Min. waiting period between each coats at 20±2°C:	18 h	10 h
Recommended temperature of application :	From +10°C to +35°C	From +10°C to +35°C
Dry mortar use at min. thickness :	1.5 kg/m ²	1.5 kg/m ²
Amount of surface realized with each package:	environ 13 m ²	environ 13 m ²
Can be moderately walked on in :	72 h	48 h
Complete hardening after:	28 dd	28 dd

PRECAUTIONS

Before starting the coating cycle, make sure that all the necessary precautions of stability and reliability of the support are respected. Carry out each structural repair and repair of cracks and fissures before applying **Pentacem Micro 5**. In the presence of stains of dirt, oil, or anti-adherence products, act mechanically with specific detergents on the support. Finally, make sure of their perfect neutralization before proceeding to the following steps. The composite cement / resin coatings require mild temperatures, i.e. between 10°C and 35°C. Before applying the two-component mortar, the first coat of **PENTARESIN PAV 11** (diluted with water in ratio 1:1) should be applied, in order to consolidate and isolate the substrate. If after the first coat the substrate is still porous and absorbent, it is recommended to apply a second coat of undiluted resin.

- Do not apply **Pentacem Micro 5** outdoor, if precipitations are expected within 24 hours after application.
- Do not apply **Pentacem Micro 5** at temperatures above 35°C and below 10°C.
- Never expose **Pentacem Micro 5** to a direct or excessive artificial ventilation during its drying phases.
- Never expose **PENTARESIN PAV 11** to a temperature below 5°C.
- Use the primer **PENTARESIN PAV 15** to pre-treat very smooth surfaces.
- Do not apply **Pentacem Micro 5** on surfaces or supports not perfectly clean or sucked and primed (in the case of rough or porous cementitious substrates, use **PENTARESIN PAV 11** as a bonding primer).
- Never place any foreign product into the product and into the cycle.
- Each layer of **Pentacem Micro 5** or any further treatments can be applied only after being sure of the perfectly dry state of the previous layer.
- **Never use Pentacem Micro 5 if in the mixture there are sizeable lumps due to the beginning of the hardening process. Do not add water or resin. The mixture should be discharged according to current waste regulations.**

STORAGE AND VALIDITY

If it is stored in a dry place and in the original bags kept perfectly closed, **Pentacem Micro 5** has 6-month validity beginning with delivery. It is therefore advisable to close bags carefully after each collection.

PRECAUTIONS

Pentacem Micro 5 is slightly irritating when it comes in contact with skin. It is easily removable with water and soap. In case of accidental contact with the eyes, it can cause serious eye damage. It is therefore recommended to wash thoroughly with water and consult a medical specialist. Inhalation can cause a slight irritation of the upper respiratory tract, so it is recommended to use a dust mask.

In the case of accidental loss, it should be collected in the dry state and discharged in an authorised site. If possible, dry clean the surface, avoiding the use of water.

PACKING

Pentacem Micro 5: 15 kg paper bag.
Pentaresin PAV 11: 5 kg can.

Les données techniques indiquées dans cette fiche ont été enregistrées au moyen d'essais et des règles standardisées ou leurs modifications, selon les systèmes Pentachem. Les modalités appliquées peuvent être demandées à notre service technique.

Ce qui est indiqué dans cette fiche technique représente le mieux de nos connaissances et de nos expériences. De toute façon on conseille d'effectuer des essais techniques préventives pour des emplois différents de ceux étant indiqués. En tout cas, PENTACHEM Srl n'assume aucune responsabilité pour des dégâts ou défauts causés par l'emploi de ses produits, les conditions d'emploi n'étant pas sous son contrôle. PENTACHEM Srl Informe aussi que son service technique est à la disposition de la clientèle pour tout renseignement inhérent à l'emploi correct de ses produits.

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