



# MAPEI



# Keracolor PPN

**Pozzolanic, quick-setting mortar with high mechanical strength and very low absorption, for grouting paved floors with joints from 5 to 30 mm subject to heavy stresses and intense traffic**



## WHERE TO USE

High mechanical strength mortar with very low absorption for grouting all types of paved floors (porphyry slabs and blocks, stone, cement-based composites, ceramic, etc.) in heavy duty areas and those subject to intense traffic.

### Some application examples

**Keracolor PPN** is used to form a grout with very low water absorption and high mechanical strength for use on paved surfaces subject to intense stresses and heavy traffic, such as:

- company forecourts subject to very heavy loads;
- public roads and squares exposed to inclement weather and subject to high stresses caused by traffic (buses, lorries, crossroads, traffic lights, etc.);
- public pedestrian areas;
- car parks and entrances to garages.

## TECHNICAL CHARACTERISTICS

**Keracolor PPN** is a pozzolanic, quick-setting mortar for floor joints made up of a blend of special hydraulic binders, selected inert material, special polymers, water-repellent additives, organic molecules and pigments.

Joints grouted using **Keracolor PPN** are characterised by their high resistance to wear and high mechanical strength. They are also particularly resistant to equipment used for street cleaning and de-icing salts.

Thanks to the special composition and very low absorption which characterises this product, they are resistant to freeze/thaw cycles and adverse weather conditions, are not washed away over the years and are not subject to the formation of surface efflorescence.

## RECOMMENDATIONS

- Do not lay the product if it is about to rain or if it will be continuously exposed to sunlight, unless some form of protection is employed.
- Do not apply the product if the temperature is lower than +5°C or higher than +25°C.
- If paved slabs with a rough or decorative surface are laid, carry out a preliminary test to make sure cleaning is possible. If necessary, apply a protective layer on the surface of the slabs (such as **Mapedrain EasyClean**).
- After applying the mortar, stains may appear on the surface of particularly absorbent slabs or their colour may be altered if they are not treated with **Mapedrain EasyClean**. However, these effects will disappear in time due to normal use and the action of adverse weather conditions.
- Do not use **Keracolor PPN** to grout special paved drainage floors, the product may reduce the permeability of the slabs.
- Never add water to the **Keracolor PPN** mix once it has started to set.

<b>TECHNICAL DATA (typical values)</b> Conforms to the following Standards:	
	– EN 13888, as CG2 – ISO 13007-3, as CG2WAF
PRODUCT IDENTITY	
<b>Consistency:</b>	powder
<b>Colour:</b>	grey
<b>Bulk density (kg/m³):</b>	1,600
<b>Dry solids content (%):</b>	100
<b>Shelf life:</b>	12 months in its original, well-closed packaging
<b>Hazard classification according to EC 1999/45:</b>	irritant. Before using refer to the "Safety instructions for preparation and application" paragraph and the information on the packaging and Safety Data Sheet
<b>Customs class:</b>	3824 50 90
APPLICATION DATA (at +23°C and 50% R.H.)	
<b>Mixing ratio:</b>	100 parts of <b>Keracolor PPN</b> with 14-16 parts of water (25 kg of <b>Keracolor PPN</b> with 3.5-4 litres of water)
<b>Consistency of the mix:</b>	fluid paste
<b>Density of the mix (kg/m³):</b>	1900
<b>Pot life of mix:</b>	20 minutes
<b>Recommended application temperature range:</b>	from +5°C to +25°C
<b>Set to light foot traffic:</b>	6 hours
<b>Ready for use:</b>	3 days for low to medium loads 7 days for intense traffic and heavy stresses

- Do not mix **Keracolor PPN** with other binders (e.g. cement, lime, gypsum, **Mapedrain Binder**, etc) or inert materials.
- Do not sprinkle the surface of the grout with **Keracolor PPN** powder if it is still fresh.
- For paved floors subject to intense traffic and heavy stresses, the width of the joints must be at least 8 mm.

## APPLICATION PROCEDURE

### Preparation of the substrate

The substrate on which the slabs are to be laid, and also any installation mortar which may be required, must be suitably strong and able to withstand all the loads which the floor will have to bear.

The substrate must be solid enough to ensure that permanent loads or pools of water do not cause it to subside.

The floor must be laid according to careful laying techniques, so that the tile joints are not damaged once they have been completed.

### Preparation of the joints

The joints must be carefully cleaned and raked out before grouting. If the slabs are vibrated after laying, make sure that the joints are filled with mortar to at least 1/3 of their depth to prevent them from moving.

Otherwise, fill the joints to 1/3 of their depth with **Keracolor PPN** powder or with gravel. The joints must be at least 5 mm wide (8 mm in the case of paved floors subject to intense stresses) and at least 25 mm deep (40 mm in the case of paved floors subject to intense stresses).

In the case of narrow, deep joints the **Keracolor PPN** mix may not penetrate right down, and may leave voids. After freezing weather, water which remains in these voids may cause fracture of the joints.

If the product is used to repair the grout of an old slab, the joints must be emptied beforehand and the surfaces and edges must be carefully cleaned.

If particularly absorbent slabs are used, before grouting the joints, their surface must

be wetted uniformly, but avoiding pools of water in the joints.

### Preparation of the mix

While stirring, pour **Keracolor PPN** into a clean, rust-free container of 14-16% in weight of clean water (3.5-4 litres of water every 25 kg of powder). Stir the mix, preferably with a low-speed mixer to avoid drawing in air, until a smooth paste is obtained. Use the mix within 20 minutes of its preparation.

### Application

Fill the joints with the **Keracolor PPN** mix using a special MAPEI rubber trowel or rake, without leaving any gaps or steps. If the joints are narrow, the grout may fall out and will have to be applied again.

When the mix loses its flexibility and starts setting, clean off the residual **Keracolor PPN** with a hard, damp cellulose sponge (e.g. a MAPEI sponge), working in a diagonal direction with respect to the joints. This operation may also be carried out with a special machine with a sponge belt.

An alternative method is to dampen the joints regularly with a hose pipe. Cleaning may be carried out with a powerful water jet once **Keracolor PPN** has started to set.

Protect the joints from rain and dust for at least 6 hours after grouting.

After 3 days, final cleaning of the paved floor may be carried out with a jet of water. After 7 days, the floor may be cleaned using a street cleaning machine.

### SET TO LIGHT FOOT TRAFFIC

The grouted surface may be stepped on after 6 hours (at +23°C and 25% relative humidity).

### READY FOR USE

The surface may be subject to light to medium loads after 3 days and may be put into full service after 7 days (at +23°C and 50% relative humidity).

### Cleaning

Tools and containers may be cleaned while the product is still fresh using plenty of water. Once **Keracolor PPN** starts setting, they may only be cleaned mechanically.

### CONSUMPTION

Consumption depends on the width of the joints and the size of the slabs.

### PACKAGING

**Keracolor PPN** is available in 25 kg sacks.

### STORAGE

**Keracolor PPN** grout remains stable for at least 12 months if stored in its original, sealed packaging.

Manufactured in compliance with the regulations of the 2003/53/EC Directive.

### SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION

**Keracolor PPN** contains cement that, when in contact with sweat or other bodily fluids, produces an irritant alkaline reaction and allergic reaction in those predisposed.

Wear protective clothing, gloves and eye/face protection.

For further information refer to the Safety Data Sheet.

PRODUCT FOR PROFESSIONAL USE.

### WARNING

*While the indications and guidelines contained in this data sheet correspond to the company's knowledge and wide experience, they must be considered, under all circumstances, merely as an indication and subject to confirmation only after long-term, practical applications. Therefore, anybody who undertakes to use this product must ensure beforehand that it is suitable for the intended application and, in all cases, the user is to be held responsible for any consequences deriving from its use.*

**All relevant references  
for the product are available  
upon request and from  
[www.mapei.com](http://www.mapei.com)**



**Keracolor PPN**



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