

Mapecolor System 34

SOLVENT-FREE, COLOURED EPOXY PAINT SYSTEM FOR INDUSTRIAL FLOORS, WITH DUST AND OIL-REPELLENT CHARACTERISTICS

Product required: Mapecolor I 300 SL

DESCRIPTION

MAPEFLOOR SYSTEM 34 is an epoxy paint system which creates a smooth, single-coloured surface on industrial floors with good resistance to chemicals, excellent protection against oil and aggressive substances and with high resistance to frequent washing and wear caused by pedestrian traffic and lightweight trolleys.

Floors prepared with **MAPEFLOOR SYSTEM 34** also have an attractive finish.

WHERE TO USE

Industrial floors subject to light traffic, such as warehouses, storage areas, garages, pedestrian zones and areas where forklifts are used. Not suitable for heavy traffic or point loading; the product does not improve the mechanical properties of the substrate.

MAPEFLOOR SYSTEM 34 is used in:

- the chemical processing and pharmaceutical industries, in storage areas;
- sterile areas, laboratories and hospitals, in areas used for storage and surrounding areas;
- automated warehouse systems, in the areas located beneath the shelves;
- shopping centres, in areas subject to intense pedestrian traffic and in areas used for storing goods;
- the food manufacturing industry, in areas used for storage and in areas subject to light traffic;
- aseptic areas, in storage areas.

PROPERTIES AND ADVANTAGES

- Smooth finish.
- Safe for the environment, does not contain solvents.
- Long-lasting, characterised by high resistance to wear and abrasion caused by continuous pedestrian traffic and frequent washing regimes.
- Resistant to most chemical agents such as dilute acids, base solutions, oil and fuel.
- Easy to clean, sanitise and decontaminate, making it particularly suitable for areas subject to light, medium and pedestrian traffic.
- Flat surfaces may be obtained, with an extremely attractive highly functional finish.
- Guarantees an excellent cost-performance ratio.

CHEMICAL RESISTANCE

Floors finished with **MAPEFLOOR SYSTEM 34** are resistant to:

- dilute mineral acids, such as: hydrochloric acid, nitric acid, phosphoric acid and sulphuric acid. Limited resistance to organic acids (refer to the chemical resistance table in the technical data sheet for **MAPEFLOOR I 300 SL**);

- alkalis, including sodium hydroxide at 50% concentration, and detergents normally used 20-30%, as long as they do not contain abrasive material;
- sugary substances, even if in frequent contact;
- mineral oils, diesel fuel, kerosene and petrol.

Since the thickness of **MAPEFLOOR SYSTEM 34** is less than 1 mm, floors are not suitable for continuous exposure to high temperatures. The maximum service temperature of the system is 40°C.

COLOURS AVAILABLE

MAPEFLOOR SYSTEM 34 is available in 19 different colours from the RAL range: refer to colours in the **MAPECOLOR PASTE** range for **MAPEFLOOR I 300 SL**.

YIELD

The consumption figures indicated below are based on application temperature between 15°C and 23°C on a smooth, compact concrete surface and final sanding treatment. Rougher surfaces or lower temperatures increase the consumption rate and lengthen the curing times.



Mapecolor System 34

MAPEFLOOR SYSTEM 34 600-700 mm

1° coat:

MAPEFLOOR I 300 SL
(A+B + **MAPECOLOR PASTE**) 0.3 kg/m²

Finishing coat:

MAPEFLOOR I 300 SL
(A+B + **MAPECOLOR PASTE**) 0.3 kg/m²

N.B.: If the **MAPEFLOOR I 300 SL** to be used is already coloured, the **MAPECOLOR PASTE** component must not be included.

SURFACE PREPARATION

1. Characteristics of the substrate

Before applying **MAPEFLOOR SYSTEM 34**, an accurate, in-depth analysis of the substrate upon which the finish is to be applied must be carried out. To make sure that a good result is obtained, verify the following:

- That the substrate is smooth.
- That there are no materials on the substrate which could impede the adhesion of successive finishes, such as:
 - cement laitance;
 - dust or areas which are either loose or not well bonded;
 - protective wax, curing agents, paraffin or efflorescence;
 - oil stains or layers of dirty resin;
 - traces of paint or chemical products.
- Other contaminants which may compromise bonding of the finish must be removed before carrying out installation. If the substrate is contaminated it is ESSENTIAL to implement a suitable preparation technique. If necessary, contact our company's Technical Services Department for advice.
- That the tear strength of the substrate is higher than 1.5 N/mm².
- That the level of humidity in the substrate is no higher than 2%, and that there is an adequate vapour barrier installed. If these conditions are not met, do not use **MAPEFLOOR SYSTEM 34**, otherwise detachment and/or the formation of blisters may occur.

If the aforementioned prerequisites are met, **MAPEFLOOR SYSTEM 34** may be applied on concrete industrial floors, traditional cementitious screeds, polymer modified screeds, or on shrinkage-compensated screeds such as **MAPECEM** or **TOPCEM** screeds.

2. Preparation of the substrate

Correct preparation of the surface is essential to guarantee successful application, and to guarantee the best performance of the **MAPEFLOOR SYSTEM 34**.

The most suitable preparation method is by sanding with carborundum discs or special abrasive discs, followed by vacuuming off the resulting dust. Do not use impact methods to prepare the surface, the substrate may be damaged due to the formation of micro cracks. Any defects present, such as holes, cavities,

cracking, etc. must be repaired beforehand using either **EPORIP**, **PRIMER SN** or **MAPEFLOOR I 300 SL**, depending on the size and depth of the defect or damaged area. If the substrate needs to be consolidated, use **PRIMER MF** or **PRIMER EP** (the choice of product depends on the porosity of the substrate, which will also have an effect on the consumption rate). Large hollows or highly deteriorated areas must be rebuilt beforehand using either **MAPEFLOOR EP19** three-component epoxy mortar or one of the products from the **MAPEGROUT** range. Joints which are in a poor condition must be rebuilt using the above materials. If the above guidelines are not followed, there will be a detrimental effect on quality of the work carried out.

3. Preliminary checks before application

Make sure that all the checks in item 1 "Characteristics of the substrate" have been carried out, and that all the operations indicated in item 2 "Preparation of the substrate" have been carried out correctly. The air temperature must be higher than +8°C (the most suitable temperature is from +15°C to +25°C) and the temperature of the substrate must be at least +3°C higher than the dew-point temperature.

4. Mixing and application

Follow the instructions in the technical data sheet for each single component of the system; **MAPEFLOOR I 300 SL**.

Painted dressing coat at a thickness of 600-700 µm

- First coat (**MAPEFLOOR I 300 SL**)
Pour component B (2 kg) into component A (6 kg), add the **MAPECOLOR PASTE** (0.7 kg of **MAPECOLOR PASTE** for each bag of **MAPEFLOOR I 300 SL**) and mix with a low-speed drill fitted with a spiral mixing attachment until a homogenous mix is obtained. Apply the mix uniformly and continuously using a medium-haired roller, making sure that the roll strokes criss-cross each other to obtain a defect-free surface.
- Finishing coat (**MAPEFLOOR I 300 SL**)
Pour component B (2 kg) into component A

(6 kg), add the **MAPECOLOR PASTE** (0.7 kg of **MAPECOLOR PASTE** for each bag of **MAPEFLOOR I 300 SL**) and mix with a low-speed drill fitted with a spiral mixing attachment until a homogenous mix is obtained. Apply the mix uniformly and continuously using a medium-haired roller, making sure that the roll strokes criss-cross each other to obtain a defect-free surface.

N.B.: A slightly non-slip effect may be obtained by adding 5-10% of **MAPEFLOOR FILLER** in the final coat of **MAPEFLOOR I 300 SL**.

5. Hardening and step-on times

At a temperature of 25°C, **MAPEFLOOR SYSTEM 34** may be stepped on after 16 hours. Trolleys and forklifts, however, may not drive on the surface for at least 24 hours. Lower temperatures lengthen the hardening and step-on times of the dressing.

CLEANING AND MAINTENANCE

Regular cleaning and maintenance increases the life of the treated floor, improves its appearance and reduces the floor's tendency to attract dirt. Floors made using the **MAPEFLOOR SYSTEM** are generally easy to clean with neutral detergents or with alkalis diluted in water at a concentration from 5 to 10%. Also, detergents and cleaning equipment which are suitable for cleaning resin floors are widely available. Manufacturers of these products supply all the necessary information required regarding the correct procedures to adopt. The company's Technical Services Department is also available for any kind of clarification required.

NOTE

Information regarding safety equipment and handling of the products are contained in the technical data sheets for each component. However, we recommend that protective goggles and gloves are always used when mixing and applying the products.

If the products are to be applied on surfaces or under climatic and/or service conditions which are different from those indicated in the technical data sheet for the system, please contact MAPEI's Technical Services Department.

TECHNICAL DATA (after 7 days at +23°C)	
Bonding strength (DIN ISO 4624) N/mm ²	> 1,5
Abrasion resistance (TABER Disk CS 17 - 1000 revs - 1000 g in weight) mg	98
Temperature range (open air) °C	-20 ± 40
Appearance	gloss