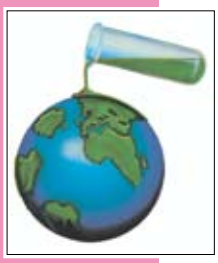

MALTA RAPIDA

Fast hardening, self levelling epoxy mortar

Description

MALTA RAPIDA is a three component product made up of:

- component A: a mix of liquid epoxy prepolymers;
- component B: copolymerization amine;
- component C: special inert material and filler.

After application and hardening, the product provides a good base, especially suitable for further coatings with finishing resins.

The main feature of MALTA RAPIDA is its capacity to spread evenly even when applied to uneven surfaces; being self levelling, it is very easy to lay.

Offers excellent adhesion to any underlying surface and a very high compression resistance.

MALTA RAPIDA is designed to harden in about 5 hours, thus making any flooring job quicker as it allows for up to two working cycles a day.

Range of use

MALTA RAPIDA is used as:

- self levelling base for floor laying jobs in the following sectors:
  - in showrooms and any type of shop, on traditional cement footing surfaces;
  - in showrooms and shops, on existing natural stone or tiled surfaces;
  - in homes;
  - in offices (Nord Resine technical assistance should be consulted beforehand in this case);
- resin coating for use in various industrial environments: in that respect, MALTA RAPIDA may often be regarded as a straight finish coating.

Application

Preparing the underlying surface

Prepare the surface according to state-of-the-art resin floor requirements: carefully examine the subfloor to make sure it makes up a suitable and structurally sound base.

- Sand and concrete footings must be left to set for a suitable length of time (at least 28 days); max residual humidity must be lower than 3% (carbide measurement); they must also have a minimum 170÷180kg/cm² compression resistance, otherwise you must increase it by deep impregnation with NORPHEN SW SOLID (diluted according to technical card instructions); you will need between 50 and 100 g pure product at least for each centimetre thickness of the surface to be consolidated.
- SC 1 ready footings can be coated over after 8 days (20°C and 50% residual humidity).
- SC 1-R quick ready footings can be coated over after 48 hours (20°C and 50% RH).
- Any footing realized with a SC 1-BASE-like binder and various sand types can be coated over after 12÷15 days (20°C and 50% RH), after checking subfloor humidity content.
- Industrial quartz concrete can be coated over after smoothing with diamond wheel or acid washing, provided its humidity content is max 3%.
- Tiled surfaces must be made rough using a diamond cup wheel.
- Large wood panelled surfaces can be coated over after treating the gaps with NORPHEN PU reinforced with a 160g/m² GLASS MESH strip (about 5÷7 cm wide), followed by fine dusting with 0.1÷0.5 mm. quartz sand.

Detailed surface preparation

1) Surface humidity content lower than 3%:

- Before you directly pour MALTA RAPIDA, make sure the underlayment is cohesive enough and does not show holes or depressions more than 3 mm deep;
- otherwise spread a layer of NORPHEN FONDO SL beforehand, and dust lightly with 0.2÷0.7 mm sand (you will need approx. 0.8 to 1.0 kg/m²).
- prepare MALTA RAPIDA following technical card instructions, especially in connection with the choice of SUMMER or WINTER version, and pour over the surface using a plain or toothed spatula, not a bubble bursting roller.

2) Surface humidity content between 3 and 4.5 %:

- Apply a coat of NORPHEN SW SOLID diluted 1:2 in water;
- the day after, you can go ahead with MALTA RAPIDA.

3) Surface humidity content higher than 4.5 %:

- apply a coat of NORPHEN SW SOLID diluted 1:2 in water;
- smooth over with NORPHEN W3 (amount needed: *c.*1.5 kg/m²);
- wait 48 hours, then proceed with MALTA RAPIDA.

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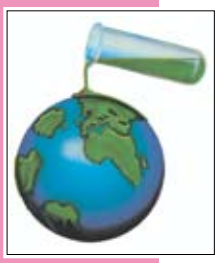

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4) Industrial quartz concrete:
- shot blasting is the best way to prepare this type of surface before applying MALTA RAPIDA;
- on the now rougher surface, you can spread the product directly (no need for further preliminary operations).

5)Section gaps

Pay special attention to section gaps; this the procedure to follow:

a. industrial quartz floors up to 15 cm thick, less than 1 year old, with only one reinforcing mesh:
   - cut and seal to finish;

b. floors as above, more than 18 cm thick and with two reinforcing meshes, or else floors with only one reinforcing mesh (more than 1 year old):
   - fill up the gap and make a band of NORPHEN PU elastomeric resin reinforced with a 160 g/m² GLASS MESH strip.

Preparing and laying the mix:
- pour into a container first MALTA RAPIDA component A, then component C and mix together to obtain a homogenous mixture;
- add MALTA RAPIDA component B, mix again quickly and proceed immediately to lay the mixture.

Use: plain or toothed 48 cm steel spatula to lay MALTA RAPIDA.

Do not use: a bubble bursting roller to help lay the resin as it tends to make little lumps of resin and inert material.

Working times

MALTA RAPIDA is quite reactive even at low temperatures; as regards application temperatures, the minimum time required for the resin to suitably harden up in order to take any further finishing layer is reported herebelow:

Product version	*Temperature [°C]*	*Time [hours]*
Winter	+1	24
Winter	+12	5
Summer	+20	5

Yield

For a 2.5 mm coating you will need *c*. 4 kg/m^2.

Colours

MALTA RAPIDA is supplied in its standard colourless version. A colour version can be required for use as a finish coating.
The cost can vary according to the required colour.

Warnings and special instructions

✓ **Do not apply on**:
- parquet;
- linoleum;
- rubber;
- any surface likely to expand considerably on the joining gaps.

✓ Measure the temperature of the room where you are going to work in order to be able to choose the correct product version accordingly:

Temperature interval [°C]	*MALTA RAPIDA Version*
From +0 to +15	WINTER
Over +15	SUMMER

✓ Remember that you must keep working on the product; a team of people should be perfectly timed to get the next mix ready just as they finish with the previous one, with no gaps in between.

✓ According to room temperature, the product must be kept cool in summer, to prevent an increase in the system reaction time with temperature, and warm in winter, as in the cold weather resins tend to crystallize and become less fluid.

✓ Mix components A, B and C in the exact amounts reported on the label: if needed, and in order to use only part of the pack, weigh out the ingredients according to the correct component "Ratio" reported on the pack.

✓ Read the Safety Card.

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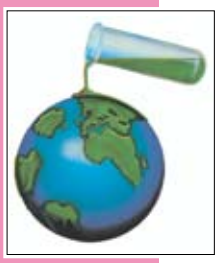

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Technical features

mass per volume, UNI 8310	SUMMER	g/cm³	1.55 ± 0.05
	WINTER		1.53±0.05
pot-life, UNI EN ISO 9514	SUMMER	Min	7 (at +15°C) 5 (at +23°C)
	WINTER		20 (at +1°C) 5 (at +15°C)
minimum setting time		Days	> 7
application temperature	SUMMER	°C	+15 to +30
	WINTER		0 to +15
adhesion to concrete (pull-off test), ASTM D 4541 (support breaking)		Mpa	3.5 ± 0.5
resistance to UV cycles and condensation, ASTM D 4329 (168 hours exposure)		ΔE Δ gloss	> 35 > 80
bending resistance, UNI EN-196-1		Mpa	35 ± 1
compression resistance, UNI EN-196-1		Mpa	80 ± 2
hardness (Shore D), ASTM D 2240		D	> 65
abrasion resistance, UNI 8298/9		Mg	100 ± 20
A : B : C Ratio	SUMMER	2 : 1 : 9	
	WINTER	2 : 1 : 7.5	

Note: test data refer to quoted regulations.

Packing and storage

MALTA RAPIDA is available in the following packs:
- 20 kg (A+B+C) in the SUMMER version;
- 17.5 kg (A+B+C) in the WINTER version.

Store indoors, at temperatures ranging between +5 and +30°C.

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