ECO RAPID INDU

Self-leveling compound for industrial and decorative purposes

CT-C40-F10	40 N/mm²	4 hours	2–40 mm
STRENGTH CLASS · DIN EN 13813	COMPRESSIVE STRENGTH	WALKABLE · FULLY LOADABLE IN 4 DAYS	LAYER THICKNESS

PROPERTIES AND BENEFITS

- Very low emission EMICODE EC 1PLUS
- Made with alternative materials that have low CO_2 emissivity
- Fast curing, crack- and shrinkage-free
- Non-hazardous material, allergy-free
- Very high adhesion, resistance to compression and bending/pulling
- Good chemical & salt water resistance
- High mechanical load with strong abrasion
- Mixing with sand is possible
- Walking after 4 hours and fully solicited after 4 days

DESCRIPTION

ECO RAPID INDU is a mineral self-leveling compound for industrial and decorative purposes.

COLOUR

The original colour of ECO RAPID INDU is light grey. A variety of other colours is available.

RANGE OF USAGE

ECO RAPID INDU is suited to concrete and cement substrates both inside and outside. It handles high mechanical, chemical and abrasion stresses — floor coverings for warehouses, production areas, garages and hospitals — and is fully loadable in exterior areas after 7 days of curing at 20 °C.

Smooth layers between 2 – 40 mm thick can be made with this product.

LOADABILITY

Walkable	4 hours
Light load	1 day
Fully loadable	4 days
Fully loadable in exterior areas	7 days

Curing at 20 °C.

SLIP RESISTANCE

R 10	R 12
WITHOUT QUARTZ SAND	WITH QUARTZ SAND

Quartz sand raises slip resistance for exterior and heavy-traffic areas.

ECO RAPID INDU

Technical information

STRENGTH AND CLASSIFICATION

Strength class	CT-C40-F10 (DIN EN 13813)
Compressive strength	approx. 40 N/mm²
Flexural strength	approx. 10 N/mm²
Abrasion resistance	Böhme A12
Emission class	EMICODE EC1PLUS

DENSITY

Bulk density	approx. 1.2 kg/dm³
Fresh mortar density	approx. 2.0 kg/dm³

APPLICATION

Application thickness	2 – 40 mm
Consumption	approx. 1.8 kg/m² per mm
Mixing ratio	4.75 L per 25 kg powder
Processing time at 20 °C	approx. 35 min
Processing temperature	min. +2 °C, max. +35 °C

PACKAGING AND STORAGE

Packaging	25 kg paper bag
Storage	12 months in original packaging
Storage temperature	not below 0 °C, recommended 10–25 °C

Reseal opened containers immediately and use within a very short time.

The information above is given based on our experiences. Adjustment may be required in case of object specific fluctuations.

PREPARATION OF SUBSTRATE

Prior to coating, ensure that the surface is stable and has sufficient surface tensile strength. The surface should also be ready for coating, dry or matt damp, clean and free from all kinds of debris. Mechanical surface preparation e.g. shot-blasting is recommended. Deeper ruptures must be filled with ECO REPAIR. The surface should be permanently vibration-free and crack-free. Already existing cracks must be repaired professionally. The pull of test should be min. 1.5 N/mm².

The substrate has to be dry for priming, and dried for 2 hours after priming with ECO PRIMER. By priming the surface, the absorbency of the substrate is adjusted. This avoids the rising of air bubbles during the subsequent coating. In order to guarantee this on critical undergrounds, a test area of 1m² should be created. Apply a further layer of primer if necessary. The coating work on the primer has to be finished within 6 hours. Please refer to the technical data sheet of ECO PRIMER for more information.

Expansion joints have to be adopted. For simultaneous work on various substrates with changing absorbencies the surface has to be pre-leveled to maintain a uniform coloring. For this purpose ECO RAPID INDU is applied by a toothed spatula or a screed rake. The layer thickness should be 1 mm. For application of the second layer the pre-leveled underground has to be primed again. The primer can be applied approximately after 6 hours. Observe waiting times until the next coating.

MIXING AND APPLICATION

First, add 4.75 liters of water per 25 kg powder material into the mixing container. Then, pour powder inside while stirring. For manual applications use a suitable handheld mixer. We recommend using the mixing paddle COLLOMIX DLX 152 HF. By using the respective mixing paddle, a proper thread adapter must be used. The material has to be mixed intensely for 2 minutes, left to set for 2 minutes, and then mixed again for 1 more minute. Single mixing batches must be mixed fast and uniform. The material has to be poured out seamlessly within the workability time. With manual processing an aeration time of up to 5 minutes has to be maintained between the end of the mixing time and application of the material. This minimizes rising of air bubbles within the poured material. The use of a continuous mixing pump or a semi-automatic charge mixer is required for large areas. Mixing time for the semi-automatic charge mixer is approximately 4 to 6 minutes per 100 kg powder.

After mixing, apply ECO RAPID INDU onto the primed surface and distribute it with a pin leveler to the intended thickness. In order to avoid processing marks in the fresh surface use a surface scraper to smoothen the surface. For single-colored floors a thin spiked roller can be used on the freshly laid mortar for better levelling and deaeration. Consider the spikes to be long enough.

For optimal leveling of the fresh mortar and to maintain the flatness tolerances according to NBN ISO 7976-1 it is recommended to use a layer thickness of approximately 3 – 5 mm for larger areas. Thereby the required layer thickness depends on the surface quality of the substrate which has to be coated.

The coating has to be protected from too quick drying (solar radiation, draft), frost and rain for the 1st 24 hours. Do not cover the finished surface with foils or other materials. Use disposable overshoes to protect the surface until sealed against dirt and moisture.

> **Note concerning post-processing and coating protection**
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> To achieve a higher abrasion resistance or chemical resistance we recommend a combined application of ECO HYDRO SIL and ECO HYDRO GLASS or ECO TOPCOAT MAT. Please refer to the respective data sheets for more information.

TOOLS AND CLEANING

All equipment should be washed clean and dried before and after application.

PIGMENTATION

The respective pigment is added to the mixing water in the desired dosage. The pigment has to be mixed intensively for 1 minute. In case of single colored floors all further steps are carried out as described above. For floors with two or more colors conventional tools (screed rake, spiked roller, etc.) should not be used due to the possible influence on the design concept. Without using these tools the fresh mortar has to be distributed with a suitable trowel.

The used pigments should be suitable for mineral flooring products. The usability of specific pigments should be pretested. Generally, only inorganic pigments should be used. Do not use organic pigments or pigment preparations. For fast mixing and uniform color distribution we recommend liquid pigments. In case of liquid pigments do not exceed the maximum dosage of 0.5% referred to the ready-to-use mix. In case of powder pigments a maximum dosage of 2% is recommended. Higher dosages lead to a decreased overall surface quality and to shorter workability times. By using liquid pigment preparations, the used amount of water can be reduced down to 4.5 L to ensure a uniform color distribution. For a cloudier finish (not possible with all pigments) use the standard amount of water as stated in the table.

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Notes, safety and declaration of performance

NOTES

Some minor colour differences are inevitable due to different production batches. This should be taken into account while performing work. It is necessary to work on designated sections with the same batch (see label) if a uniform colour is desired. Due to different water addition during application or changing working techniques, light colour shades in the coating surface can occur. Please take note that this coating is a mineral/inorganic product.

SAFETY, ECOLOGY AND ELIMINATION

There is no mandatory hazard labeling for ECO RAPID INDU. Avoid inhaling dust when opening packaging. Protect skin and eyes during the mixing process. Please refer to the Material Safety Data Sheet (MSDS), available on request at nbsdistribution.eu, for further information on safety during transportation, storage, handling, and disposal. Follow instructions on the packaging.

DECLARATION OF PERFORMANCE

CE

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CE — manufacturer details and Declaration of Performance on request from NBS Distribution

NO. ECO RAPID INDU · EN 13813

EN 13813 CT-C40-F10-A12

Mineral self-levelling compound for industrial and decorative purposes.

Fire behaviour	A1
	C40
Flexural strength	F10
Release of corrosive substances	CT
EPD	No. MD-26094-EN, EPD Danmark

AVAILABLE ON REQUEST

Material Safety Data Sheet (MSDS).

The content of this technical data sheet corresponds to the latest development and our applications experience. All information is based on ideal conditions and therefore does not apply for every application purpose. Due to different materials, substrates and different actual site conditions no warranty is given for the customer's application. In particular, we assume no liability based on this information or any verbal statements. The only exception is when we can be blamed for intent or gross negligence. In that case the customer has to prove that he has transmitted all required information completely and in a timely manner for a proper evaluation by NBS Distribution. Any further details regarding the application of our products have to be confirmed in writing by NBS Distribution. The customer must test the product's suitability for the intended application and purpose. We reserve the right to change the product specifications due to ongoing development. Apart from that our general terms and conditions are valid. This data sheet supersedes all earlier technical data on this product. The technical data sheet can be requested on nbsdistribution.eu.