ECO RESIST

Self-levelling industrial floor, high chemical & abrasive load

pH 3–14	700 °C	2.5 bar	CT-C50-F10
CHEMICAL RESISTANCE	FIRE RESISTANCE	WATERPROOF TO	STRENGTH CLASS · EN 13813

PROPERTIES AND BENEFITS

- Eco-Binder technology
- Saltwater resistance
- Very low emission EMICODE EC1^{PLUS}
- Fast curing and tension-relieved
- Waterproof up to 2.5 bar
- Very high abrasion resistance
- Also processible by machine
- Good chemical resistance (pH 3–14)
- Environmentally friendly
- Mineral
- Fulfils discharge capability requirements per DIN EN 61340-5-1
- Fire-resistant up to 700ºC
- Easy application

DESCRIPTION

Eco Resist is a self-levelling industrial floor for high chemical and abrasive load. Hardens fast and is tension-relieved, at a layer thickness of 2–50 mm.

RANGE OF USAGE

Ideal for indoor and outdoor use, as a coating for areas with high mechanical and chemical load such as garages, warehouses, production areas, airports and power plants. Applicable in layer thicknesses of 2–50 mm; for larger areas, approx. 3–5 mm is recommended.

ECO RESIST

Technical information

STRENGTH AND CLASSIFICATION

Strength class, DIN EN 13813	CT-C50-F10
Compressive strength	approx. 50 N/mm²
Flexural strength	approx. 10 N/mm²
Abrasion resistance, Böhme	A12

SLIP RESISTANCE

Without quartz sand	R 10
With quartz sand	R 13 / V8

MIXING AND PROCESSING

Mixing ratio	4.5 L water / 25 kg powder
Processing temperature	min. +2 °C, max. +35 °C
Processing time at 20°C	approx. 35 min
Consumption	approx. 1.8 kg/m² per mm layer

LOADABILITY

Walkable	after 4 hours
Light load	1 day
Fully loadable	4 days
Fully loadable, exterior	7 days

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

PREPARATION OF SUBSTRATE

The surface must be dry and clean, free from separating agents; mechanical preparation such as shot-blasting is recommended. Deeper ruptures must be filled with Eco Repair. The surface must be permanently vibration-free and crack-free, with existing cracks repaired professionally (pull-off test min. 1.5 N/mm²). The concrete surface must be dry for priming, and dried for 2 hours after priming with Eco Primer; a 1 m² test area is recommended on critical undergrounds, with coating work on the primer finished within 6 hours.

For simultaneous work on different substrates, apply a 1 mm layer first to avoid excessive colour and absorbency differences, waiting 6 hours before priming again. Prime again before the second layer to avoid bubbles, with expansion joints taken over. Protect ceilings, walls, windows and doors from dust and insects during the fresh mortar's setting.

Add 4.5 L water per 25 kg powder into the mixing container, then pour the powder in while stirring, using a suitable handheld mixer for manual applications. Mix intensely for 2 minutes, let set for 2 minutes, then mix again for 1 minute; maintain a 5-minute aeration time before application to minimise air bubbles. Large areas require a continuous mixing pump or semi-automatic charge mixer (approx. 4–6 minutes per 100 kg powder).

Apply onto the primed surface and distribute with a pin leveller to the intended thickness, using a surface scraper to avoid processing marks; a thin spiked roller aids levelling and deaeration. For larger areas, a layer thickness of approximately 3–5 mm is recommended for optimal levelling per NBN ISO 7976-1. Protect the coating from too-quick drying (solar radiation, draft), frost and rain for the first 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

For higher abrasion or chemical resistance, a combined application of Eco Hydro Sil and Eco Hydro Glass, or Eco Topcoat Mat, is recommended.

TOOLS AND CLEANING

Mixing device (drill mixer or pump), trowel, spiked shoes, spiked roller, and screed rake or pin leveller. All equipment should be washed clean and dried before and after application.

ECO RESIST

Notes, safety and declaration of performance

NOTES ON COLOUR

Minor colour differences are inevitable due to different production batches — work on designated sections with the same batch if a uniform colour is desired. Different water addition or working techniques during application can cause light colour shades. This is a mineral/inorganic product; colours should only be treated as estimated classifications.

PACKAGING AND STORAGE

25 kg paper bag. 12 months in original packaging, in a dry and controlled environment (not below 0ºC, recommended 10–25ºC). Reseal opened containers immediately.

SAFETY, ECOLOGY AND ELIMINATION

There is no mandatory hazard labelling for Eco Resist. Avoid inhaling dust when opening packaging. Protect skin and eyes during mixing. Refer to the Material Safety Data Sheet (MSDS), available on request, 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 RESIST · EN 13813

EN 13813 CT-C50-F10-A12

Self-levelling industrial floor for high chemical and abrasive load. Hardens fast and is tension-relieved, at a declared layer thickness of 2–50 mm.

Fire behaviour	A1
Compressive strength	C50
Flexural strength	F10
Release of corrosive substances	CT

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. We assume no liability based on this information or any verbal statements. The only exception is when we can be blamed for the case of 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 and promising 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 the ongoing development. Apart from that our general terms and conditions are valid. This data sheet supersedes all earlier technical data on this product.