



Rapid-drying levelling compound

# UZIN NC 172 BiTurbo



Extremely rapid-drying, cover-ready, self-levelling, cement-based levelling compound with Level Plus Effect for almost all areas of application, substrates and every layer thickness range

## Description:

Special levelling compound with high-performance plasticiser technology for the manufacture of flat, very rapid-drying, covering-ready, absorbent substrates for textile and elastic floor coverings of all types. The highly plasticised levelling compound will accept foot traffic after approx. 60 minutes. For most coverings, it is sufficiently dry for installation as soon it is set to walk on – that is, after approx. 60 minutes. Pumpable. For interior use only.

Suitable for:

- ▶ the subsequent laying of textile and elastic floor coverings of all types, PVC/CV coverings, PVC design flooring, linoleum and caoutchouc coverings in sheets and plates
- ▶ the subsequent laying of wood flooring, cork and PO floor coverings after a drying time of 12 hours
- ▶ high-stress loads in the residential, commercial and industrial sectors, e.g. industrial halls, forklift-loaded surfaces etc.
- ▶ warm water underfloor heating
- ▶ loading with chair castors according to DIN EN 12 529 above 1 mm underlay compound
- ▶ loading with forklifts ex 3 mm thickness
- ▶ as a system component in rapid construction



Offers highest possible protection against emissions and contributes in creating a healthy living environment.

Was awarded the "Blue Angel" for low-emission floor covering adhesives and other adhesives in compliance with RAL-UZ 113.



<b>CE</b>	
Uzin Utz AG Dieselstraße 3 D-89079 Ulm	
See date of manufacture on the packaging	
<b>EN 13 813 CT-C50-F10</b>	
Cementitious levelling compound for substrates in interior locations	
Fire resistance	<b>A2fl-s1</b>
Compressive strength	<b>C50</b>
Tensile strength	<b>F10</b>

## UZIN ÖKOLINE



**Composition:** Special cements, mineral aggregates, polyvinyl acetate copolymers, high-performance plasticisers and additives.

- ▶ Covering-ready after 60 minutes
- ▶ Hydraulic setting
- ▶ Mostly no priming required
- ▶ Up to 10 % less adhesive consumption
- ▶ Low chromate content
- ▶ EMICODE EC 1 R/Very low emissions
- ▶ RAL UZ 113/environmentally friendly, due to very low emissions

## Technical Data:

Packaging:	paper sack
Packsizes:	25 kg
Shelf life:	min. 6 months
Required water quantity:	6 – 6.5 litres per 25 kg bag
Colour:	dark-grey
Consumption:	approx. 1.3 kg / m <sup>2</sup> per mm thickness
Minimum working temperature:	10 °C / 50 °F at floor level
Ideal working temperature:	20 °C / 68 °F
Working time:	max. 15 minutes*
Set to foot traffic:	after 60 minutes*
Covering-ready for textile, and PVC coverings, linoleum, caoutchouc:	accessible to traffic after 60 minutes*
Covering-ready for wood flooring, cork and PO floor coverings:	after approx. 12 hours*
Fire classification:	A2fl-s1 acc. to DIN EN 13 501-1

\*At 20 °C/68 °F and 65 % relative air humidity and a substrate temperature of 18 °C/64 °F. See also See also "Application – Drying".

## Areas of use:

Without priming, suitable for:

- ▶ remediation-needy old substrate bases, e.g. on sealed, adhering, water-proof synthetic resin, neoprene, bitumen or water-based adhesive bed
- ▶ new and well sanded-off, poured asphalt screeding IC 10 and IC 15

With priming, suitable for:

- ▶ new substrates, e.g. cement screeds, calcium sulphate screeds or concrete
- ▶ new, fixed-screwed chipboard V 100 or OSB boards
- ▶ existing ceramic and natural stone coverings, terrazzo and similar.
- ▶ old mastic asphalt screeds IC 10 and IC 15, as well as scraping troweling on asphaltic fine concrete
- ▶ magnesia and stone wood screeds
- ▶ pre-cast component covers, e.g. gypsum fibre board

## Product Properties / Benefits:

As a result of the novel raw material combination the Level Plus Effect results. UZIN NC 172 BiTurbo is characterised by exceptional liquid flow qualities, a very smooth surface, uniform and homogeneous surface appearance, as well as a consumption reduction of adhesive with subsequent working with adhesives. Furthermore, the adhesive is meshed uniformly and effortlessly on the very-absorbent levelling compound and the floor covering surface is smoother and more uniform in case of the laying of sensitive, elastic linings. Abrasives and toothed strips are less worn and can be employed for a longer time.

Without layer thickness restrictions, with extremely high strength, low-stress and for the highest demands. Bonds exceptionally well to a great number of substrates. Special product for rapid renovation work with low-cost overall calculation.

As a result of the extremely rapid drying, complete renovations are possible within one day.

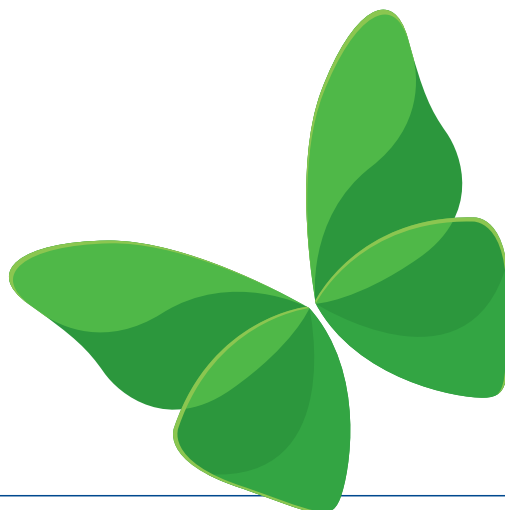
## Application Example:



NC UZIN 172 BiTurbo has the best flow characteristics of its class, it is processable for a sufficiently long time and, in spite of that, covering-ready after 60 minutes. This illustration shows filler-compound smoothing in a new building, where a rapid cover-capability under bad climatic conditions is required.



If laying should be desired later than two hours after the levelling, then the rapid-drying levelling compound can be easily ground off. In spite of its high strength, a rapid and intensive grinding result is possible between 2.5 and 4 hours after the levelling.



## Substrate Preparation:

The substrate must be sound, load-bearing, dry, free from cracks, clean and free from materials (dirt, oil, grease) which would impair adhesion. Cement and calcium sulphate screeds must be abraded and vacuumed off. Test the substrate in accordance with applicable standards and specification sheets and report any deficiencies.

Remove any adhesion-reducing or unstable layers, e.g. stripping compound, loose adhesive, levelling compound, covering, or paint coat residues and similar, e.g. through brushing off, abrading, milling off or shot-blasting. Thoroughly vacuum off loose material and dust. According to type and characteristic quality of the substrate, select a suitable primer from the UZIN product range. In case of certain substrates, such as e.g. old screeds with sealed, water-proof, well-adhering adhesive residues, prior priming can be dispensed with. In case of layer thicknesses above 3 mm, priming is generally to be carried out. Allow primer to dry out completely.

Refer to the Product Data Sheets for other products used.

## Application:

- Put 6.0 – 6.5 litres cold, clear water into a container. Sprinkle in the sack contents (25 kg) while stirring vigorously and blend to a semi-viscous, lump-free mixture. Use a drill-mixer with the UZIN levelling compound mixing accessory.
- Pour out the mixture onto the substrate and distribute evenly with a smoothing trowel or the UZIN surface rake. In case of thicker layers and/or when the rake is used, the already excellent flow and surface characteristics can be further improved by removing air with the UZIN spike ventilation roller. Where possible, apply the required layer thickness in one work operation.
- Remove insignificant irregularities through grains of sand and possibly swelling with the smoothing filler. The compound can be very well ground down in the period 2.5 – 4 hours after the filling.

## Consumption:

Thickness	Consumption	Approx. coverage per 25 kg sack
1 mm	1.3 kg/m <sup>2</sup>	19 m <sup>2</sup>
3 mm	3.9 kg/m <sup>2</sup>	6 m <sup>2</sup>
10 mm	13.0 kg/m <sup>2</sup>	2 m <sup>2</sup>

## Spreading UZIN NC 172 BiTurbo:

Thickness	Ideal spreading quality and make-up quantities
10 – 15 mm	30% UZIN Fine Sand 0.8 (8 kg sand / 25 kg powder)
15 – 30 mm	50% UZIN Coarse Sand 2.5 (12.5 kg sand / 25 kg powder)
30 – 50 mm	50% screed sand 0/8 (12.5 kg sand / 25 kg powder)

According to sand, thickness and moisture content, the water factor is to be correspondingly reduced.

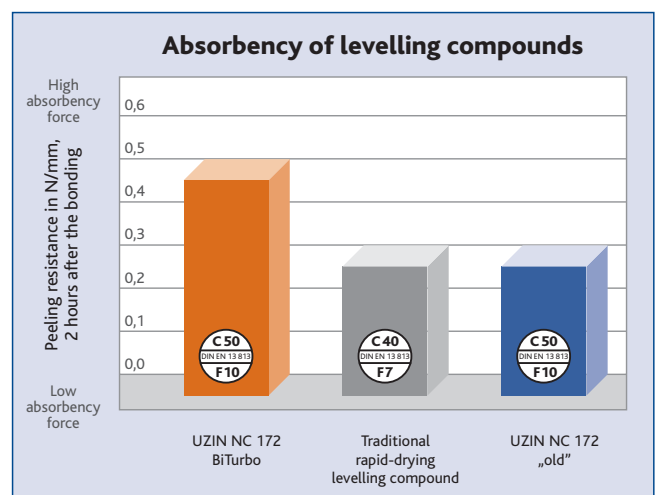
## Ready for Application:

Floor coverings	Ready for application:
Textile coverings	after 60 minutes*
Elastic coverings, e.g. PVC, linoleum, caoutchouc, ceramics	after 60 minutes *
Textile and elastic coverages with Sigan 1 + Planus Primer	apply Planus 4 h after levelling at the earliest
Wood flooring, cork, polyolefin coverings	12 hours*

\*At 20 °C/68 °F and 65 % relative air humidity and a substrate temperature of 18 °C/64 °F.

The readiness for further covering is independent of layer thickness, however it depends considerably on the climatic conditions on site.

## Practical note:



The absorption capacity of UZIN NC 172 BiTurbo is approx. twice as high as usual rapid-drying levelling compounds. The open time of the adhesive during the laying is considerably reduced in comparison with usual compounds. The installer of the upper layers works far faster and the overall appearance of the finished floor covering surface is very smooth and flat.



## Important Notes:

- ▶ Shelf life minimum 6 months in original containers when stored in dry conditions. Tightly re-seal opened containers and use the contents as quickly as possible.
- ▶ Optimum working conditions are 20 – 22 °C/68 – 72 °F and relative humidity below 65%. Low temperatures and high air humidity delay the laying, drying and curing maturity, while high temperatures and low air humidity accelerate them. In summer, store in cool conditions and use cold water.
- ▶ Expansion, movement and wall connection joints resulting from the substrate must be taken up. As required, fit UZIN expansion strips against adjacent structures to prevent ingress of the compound into connection joints. For thickness above 5 mm, expansion strips should be used.
- ▶ Pumpable with continuous feed mixer-pumps, e.g. from the manufacturers m-tec, P.F.T. and other.
- ▶ Minimum 1 mm thickness for resistance to castors and 3 mm for forklift-loading suitability. Smoothing compound on non-absorbent substrates, such as e.g. old screed with closed, water-proof adhesive bed, generally 2 – 3 mm thick.
- ▶ If additional coats are required, allow the compound to dry out > 6 hours, intermediate-prime with UZIN PE 60 and after drying (1 hour) apply the next coat. The second compound application must not exceed the layer thickness of the first coat.
- ▶ Under wood flooring, the minimum layer thickness is 2 mm.
- ▶ In case of layer thicknesses above 10 mm, on moisture-sensitive (calcium sulphate screeds) or unstable substrates (e.g. adhesive residues), epoxy resin primers should be used, e.g. UZIN PE 460 gritted.
- ▶ In case of unstable old substrate bases with several adhesive or levelling compound layers, the use of a gypsum-based levelling compound, such as UZIN NC 110 or UZIN NC 115 is to be preferred.
- ▶ In case of freshly mastic asphalt screeds or screeds with residues of adhesives (without primer), thicknesses to max. 3 mm are admissible, and in case of older mastic asphalt screeds or higher thicknesses at existings substrates with adhesive residues (with primer), gypsum-based levelling compounds, such as e.g. UZIN NC 110 or UZIN NC 115, are to be employed.
- ▶ At new, fixed-screwed chipboards V 100 or OSB boards, layer thicknesses of up to max. 3 mm are admissible
- ▶ At installation of floor coverings with Sigan 1 + Planus the drying time before applying Planus is 4 hours (at 20 °C/68 °F and 65 % relative humidity).
- ▶ Do not use in exterior or wet areas.
- ▶ Protect freshly prepared surfaces from draughts, direct sunlight and sources of heat. On soft or tacky surfaces, cement-based levelling compounds have a tendency to crack. Therefore, soft or tacky surfaces must be removed as far as possible before applying the levelling compound. Levelling compounds left uncovered for too long will also tend to crack formation and therefore this should be avoided.
- ▶ Do not use as a screed cement or as a wearing surface; one covering/one sealing cover must always be applied.

- ▶ UZIN NC 172 BiTurbo is a component part of the system "Lowest cover coating", consisting of UZIN NC 172 BiTurbo and codex PE 370. This system has certification as a marine equipment product from the Hamburg Marine Trade Social Insurance against Occupational Accidents, Module B and Module D. Certificates are available on request. The authorised layer thickness is approx. 2.5 mm. USCG-No. Module B 164.106/EC0736/113.102.
- ▶ The following standards, regulations and publications are applicable and especially recommended:
  - DIN 18 365 "Working with floor coverings"
  - DIN 18 356 "Working with parquet and wood blocks"
  - DIN 18 352 "Working with tiles and panels"
  - TKB publication "Assessment and preparation of substrates for floor covering and parquet work"
  - TKB publication "Technical description and processing of cement floor levelling compound"
  - BEB publication "Assessing and preparation of substrates"

## Protection of the Workplace and the Environment:

Contains cement low in chromate acc. Directive 2003/53/EC. Keep out of the reach of children! Please observe the information on the bottom of the bag! Use nitrile impregnated cotton-gloves. During mixing wear a suitable dust-mask. Thorough ventilation must be ensured during and after the installation and drying time of the product. Drinking, eating and smoking are prohibited during the installation. After contact with eyes or skin, wash immediately with plenty of water. Rinse tools with water and soap immediately after use. Produces no physiological or ecological risk when fully cured.

EMICODE EC 1 R – very low emission. Within the scope of current knowledge, gives off no emissions of formaldehyde, hazardous materials or volatile organic compounds (VOC).

Basic prerequisites for best possible indoor air quality following floor covering work are conformity to standards of the working conditions, as well as thoroughly dry substrate, primer and smoothing compound.

Hotline for allergy information +49 (0)731 4097-0

## Disposal:

Where possible, collect product residues and re-use. Do not allow dispersal into drains, sewers or ground. Empty paper bags are recyclable. Collect waste material, mix with water and allow to harden, then dispose as Construction Waste.

