PRODUCT DATA SHEET

Premium smoothing compound

UZIN NC 170 LevelStar NEW

Extremely smooth and quick setting cementitious smoothing compound with Level Plus Effect S for any thickness range

Areas of application:

High performance smoothing compound with excellent flow properties. Quick drying, even under unfavourable climatic conditions. For the subsequent installation of all floor coverings, wood flooring as well as ceramics and natural stone. It is ready to accept most floor coverings after approx. 6 hours* and allows for quick and reliable installation under tight deadlines. Pumpable, for interior application.

Suitable for:

- subsequent installation of all types of textile and resilient floor covering such as PVC/CV flooring, luxury floor covering, rubber flooring, linoleum, cork, Enomer (chlorine-free) floor covering, PUR flooring, and many more
- subsequent installation of all types of wood flooring
- subsequent installation of ceramics and natural stone floor coverings
- heavy duty requirements in residential, commercial and industrial areas, e.g. in hospitals, high-traffic shopping malls, industrial shops, etc.
- hot-water underfloor heating or thin-layer heating systems
- loads from chair castors according to DIN EN 12 529 from 1 mm compound thickness

Provides the highest possible level of emission safety and contributes towards creating a healthy room climate. Marked with the **"Blue Angel"** for low-emission floor covering adhesives and other installation materials according to RAL-UZ 113.

CE
0761
Uzin Utz AG
Dieselstraße 3
D-89079 Ulm
17
01/01/0065.01
EN 13 813:2002
Cementitious levelling compound for substrates in interior locations
EN 13 813: CT-C40-F7

Reaction to fire	$A2_{fl-s1}$
Release of corrosive substances	CT
Compressive strength class	C 40
Flexural strength class	F 7

UZIN ÖKOLINE

GEV-EMICODE EC 1 PLUS very low emission

EMISSIONSKLASSE FÜR BAUSTOFFE M1

0736

BLUE ANGEL THE GERMAN ECOLABEL

LEED contributing product

www.blauer-engel.de/uz113

THIRD-PARTY VERIFIED EPD ISO 14025 and EN 15804 Institut Bauen und Umwelt e.V.

Composition: Special cements, mineral aggregates, redispersible polymers, high-performance liquefiers and additives.

- Excellent flow characteristics
- Quick drying, ready to accept floor coverings in 6 hours*
- Very high strength
- Very smooth surface
- Low chromate content according to EU-VO 1907/2006 (REACH)
- EMICODE EC 1 R PLUS / very low-emission
- RAL UZ 113 / Environmentally compatible because of low emission

Technical data:

Packaging:	Paper bag opening device
Pack size:	20 kg
Shelf life:	min. 9 months
Required water quantity:	5.25 litres per 20 kg bag
Colour:	grey
Coverage:	approx. 15 m^2 at 1 mm per bag
Min. processing temperature:	10 °C at ground level
Ideal working temperature:	15 °C – 25 °C
Working time:	20 – 30 minutes*
Ready for foot traffic:	after 1 ½ – 2 hours*
Ready for covering:	after approx. 6 hours*
Fire class:	$A2_{fl-s1}$ according to DIN EN 13501-1
Flow spread (UZIN Flow Spread Disc):	approx. 151 mm ± 5 mm

* At 20 °C and 65 % relative humidity at max. 5 mm thickness. See also "Ready for covering"

UZIN | A brand of Uzin Utz Group

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UZIN NC 170 LevelStar NEW

Extended areas of application:

Suitable for use on:

- cementitious screeds, calcium sulphate screeds or concrete
- rapid cement screeds
- substrates with old waterproof adhesives or compound residues adhering to them
- new, firmly screw-fixed chipboard P4 – P7 or OSB/2 – OSB/4 panels
- existing ceramic and natural stone coverings
- terrazzo or similar
- new and, conditionally, old mastic asphalt IC 10 and IC 15 as well as scraping levelling on fine asphalt concrete
- magnesia and xylolite screeds
- precast screeds, gypsum fibre boards

Product features / properties:

UZIN NC 170 LevelStar NEW is the premium smoothing compound with the most advanced properties for all areas of application common to construction projects. Thanks to the new type of binding agent and innovative additives, it is now quick setting, has excellent installation properties and high surface strength.

UZIN NC 170 NEW disintegrates quickly when mixing, flows superbly and produces a extremely smooth surface and uniform appearance. In spite of its high strength, UZIN NC 170 LevelStar NEW can be easily sanded. The subsequent floor covering adhesive can be applied effortlessly on the very smooth and absorbent surface using a notched trowel. This gives the installed flooring a smoother and quieter feel when installing sensitive resilient flooring. Abrasives and notched blades wear less and can be used longer.

UZIN NC 170 LevelStar NEW is suitable for new and old buildings, high wear, quick load-support and suitable for all thicknesses when extended with quartz sand.

Installation of resilient floor coverings can be started after approx. 6 hours at common a building climate of 20 °C and 65 % relative humidity up to a thickness of max. 5 mm. It also dries quickly in greater thicknesses or unfavourable climate conditions. This allows the installer to perform subsequent floor covering work very quickly, with perfect results.

Application example:

Schedules are often very tight in public buildings. It is important that the materials employed function reliably and provide ideal preparation for subsequent flooring installation.

Key factors for complying with deadlines include reliable setting and rapid strength development.
UZIN NC 170 LevelStar NEW allows the installer to control the deadlines of various construction sites and confidentially handle nearly all types of floor coverings. It also ensures the surface is ready accept the floor covering even if left to dry over night. Installers will be hard-pressed to find greater control for perfect subfloor preparation.

ballister

UZIN NC 170 LevelStar NEW

Subfloor preparation:

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

Any adhesion-reducing or unstable layers, e.g. release agents, loose adhesives, compounds, covering or paint residues etc. must be removed, e.g. by brushing-off, abrading, grinding or shot-blasting. Thoroughly vacuum loose material and dust. Use a suitable primer from the UZIN Product Guide according to the type and condition of the substrate. Allow any primers that are applied to dry completely.

The product data sheets of the other products used must be observed.

Processing:

1. Pour approx. 5.25 litres of cold, clean water into a clean container. Sprinkle in contents of sack (20 kg) while thoroughly stirring at the same time and mix to form a thick lump-free consistency. Use a drill or mixer fitted with a UZIN Mixing Paddle.
2. Pour out the mix onto the substrate and distribute evenly with a smoothing trowel or the UZIN Screed Rake, notch size R 2. The flow and surface can be improved by removing air using the UZIN Spike Roller. Where possible, apply to the desired thickness in one coat.

Consumption information:

Thickness	Approx. coverage per 20 kg sack
1 mm	15 m²
3 mm	5 m²
10 mm	1.5 m²

Extending UZIN NC 170 LevelStar NEW:

Thickness	Ideal extension material and additive
20 – 50 mm	30 % UZIN quartz sand 0.3 – 0.8 mm (6 kg sand / 20 kg)

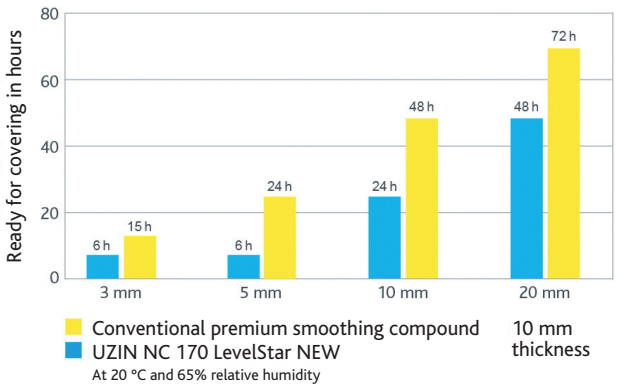
The water factor must be adapted according to sand and thickness.

Ready for covering:

Floor Coverings	Ready for covering at 20 °C / 65 % rel. humidity	
Textiles and resilient flooring (e.g. PVC, linoleum, rubber), ceramic and natural stone flooring	3 mm	Approx. 6 hours
	5 mm	Approx. 6 hours
	10 mm	Approx. 24 hours
	20 mm	Approx. 48 hours
Textile and elastic coverings with Sigan 1 or Sigan Elements Plus + Planus Primer	3 mm	Apply Planus approx. 12 h at the earliest
Wood flooring	3 mm	Approx. 15 hours
	5 mm	Approx. 15 hours
	10 mm	Approx. 24 hours
	20 mm	Approx. 72 hours

Floor Coverings	Ready for covering at 10 °C / 80 % rel. humidity	
Textiles and resilient flooring (e.g. PVC, linoleum, rubber), ceramic and natural stone flooring	3 mm	Approx. 15 hours

Ready to accept floor covering depending on thickness



The Level Plus Effect S provides the installer with three essential advantages:

- **Quick:** Ready to accept floor coverings after 6 hours because of the innovative, reactive binding agent and new additive
- **Secure:** Reliable drying, even in unfavourable climatic conditions, due to high water retention
- **Strong:** Great surface strength and high strength development because of the high-quality raw materials

UZIN NC 170 LevelStar NEW

Important notes:

- Minimum shelf-life 9 months in original packaging and in cool and dry storage conditions. Over time the length of storage may also cause an extension to the setting and drying time. The performance of the cured material is not affected. Tightly seal opened packaging and use the contents as quickly as possible.
- Optimum conditions at 15 – 25 °C and relative humidity below 65 %. Low temperatures, high humidity,
- High thickness, non-absorbent or blocked substrates will delay setting, drying and readiness for covering. High temperatures, low humidity and absorbent substrates accelerate setting, drying and readiness for covering. Furthermore, drying progress depends largely on the air flow per hour. Removing moist air, e.g. through ventilation, is therefore essential to achieving quick readiness for covering.
- Store in cool and dry conditions in summer and use cold water. If not the working time is shortened.
- Expansion, movement and perimeter joints in the substrate must be adopted. Install UZIN expansion strips on all vertical components
- To prevent ingress of the compound into the connection joints. Expansion strips are generally necessary for thicknesses over 5 mm. On wooden substrates the expansion strip must be completely removed after work.
- Can be pumped with continuously mixing spiral pumps, e.g. from manufacturers such as m-tec, P.F.T. and others. Subsequent agitator recommended.
- Rooms without a basement underneath must be sealed against rising moisture in compliance with standards.
- The substructure of wooden floors must be dry to prevent damage due to dampness through rotting or mould formation. Adequate ventilation or rear-ventilation must be provided especially when installing impermeable flooring, e.g. by removing the existing expansion strip and by installing special skirting with vent openings.
- Minimum thickness for resistance to castors is 1 mm. On non-absorbent substrates such as old screeds, a closed firmly adhering waterproof adhesive bed with a thickness of 2 – 3 mm must generally be applied.
- When smoothing in several layers allow compound to dry completely, apply e.g. UZIN PE 360 as intermediate primer and smooth subsequently after drying. Subsequent application must not exceed the thickness of the previous one.
- The minimum thickness beneath wood flooring is 2 mm. Adequate drying of the smoothing compound prior to bonding wood flooring is especially important.
- For thicknesses above 10 mm or on moisture-sensitive (calcium sulphate screeds) or weak substrates (adhesive residues), use reaction epoxy resin primers, such as UZIN PE 460 or UZIN PE 414 Turbo, gritted.
- On weak older substrates with several layers of adhesive or smoothing compound the use of gypsum-based smoothing compounds such as UZIN NC 110, UZIN NC 112 Turbo or UZIN NC 115 is to be preferred.
- For new mastic asphalt screeds thicknesses up to max. 5 mm and for older mastic asphalt screeds with old layers attached thicknesses up to max. 3 mm are permissible. For greater thicknesses gypsum-based smoothing compounds such as UZIN NC 110, UZIN NC 112 Turbo or UZIN NC 115 are to be used.
- Thicknesses up to max. 3 mm are allowed for new, firmly screw-fixed chipboard P4 – P7 or OSB/2 – OSB/4 panels.
- Do not use in exterior or wet areas.
- Protect freshly smoothed areas from draughts, direct sunlight and sources of heat. Cementitious compound layers on soft or tacky substrates are prone to stress crack propagation. These soft or tacky layers must therefore be removed as much as possible before applying smoothing compounds. Leaving such compound layers open too long also tends to propagate stress cracks and should therefore be avoided.
- Do not use as wearing floor covering or wearing surface; always apply a top covering.
- UZIN NC 170 LevelStar NEW has the approval as shipbuilding equipment product by the maritime occupational association "See-Berufsgenossenschaft Hamburg", module B and module D. Certificates are available upon request. The permissible thickness is 20 mm. USCG-No. for the system is 164.106/EC0736/113.113.
- Smoothing compound must not enter between insulation and heating pipes because of the risk of corrosion. This applies in particular for heating pipes from galvanized steel. Insulation may only be cut off after.
- Follow the generally acknowledged rules of the trade and practice for the installation of wood flooring and floor covering of the respective applicable standards (e.g. EN, DIN, Ö-standard, SIA, etc.).
- The following standards and bulletins represent supporting information and are recommended for special attention:
  – DIN 18 365 "Working with floor covering", Ö-Norm B 2236
  – DIN 18 356 "Working with wood flooring", Ö-Norm B 2218
  – DIN 18 352 "Tile and slab work"
  – TKB publication "Assessment and preparation of substrates for floor covering and wood flooring installation"
  – BEB publication "Assessment and preparation of substrates"
  – TKB publication "Technical description and processing of cementitious floor levelling compounds"
  – ZVPF Technical Bulletin "Quality Requirements on the Flatness of Substrates for Floor covering and Wood flooring"

Protection of the workplace and the environment:

Contains cement low in chromate acc. Regulation (EC) No 1907/2006 (REACH). Keep out of the reach of children! 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. Do not allow dispersal into drains, sewers or ground. Rinse tools with water and soap immediately after use.

EMICODE EC 1 R PLUS – very low emission. Within the scope of current knowledge, gives off no emissions of formaldehyde, hazardous materials or volatile organic compounds (VOC). Presents no physiological or ecological risk when fully cured.

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.

For allergy information, call +49 (0)731 4097-0 (Germany).

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.

The above information is based on our experience and careful investigations. The variety of associated materials and different construction and working conditions cannot be individually checked or influenced by us. The quality of your work depends, therefore, on your own professional judgement and product usage. If in doubt, conduct a small test or obtain technical advice. Observe the installation recommendations of the covering manufacturer. The publication of this Product Data Sheet invalidates all previous Product Information. The respective updated version of this datasheet can be found on our Homepage under www.uzin.com.