Surface Strengthening Primer

u rule the floor UFLOOR INC SYSTEMS

PRIMER/MOISTURE BARRIER

UZIN PE 414 Turbo

GEV-EMICODE EC 1 very low emission

One-component reaction resin primer for flooring installations

Description:

One-component polyurethane fast dry primer for flooring installations using reaction resin adhesives. This product acts as a primer/surface strengthener on absorbent and non-absorbent surfaces and as moisture mitigation on moisture resistant substrates with moisture vapor emission up to 7 lbs. relative to a Calcium Chloride Test (90% R H) when tested using ASTM F2170-02. A two-coat application is required for moisture mitigation. Works well in most residential and commercial applications.

Suitable for/as

- A fast dry primer for glue-down wood floor installations using UZIN MK 92 S, UZIN MK 95, UZIN MK 97, or UZIN MK 200 adhesives on concrete, gypcrete, plywood, OSB including substrates with well bonded adhesive residues
- Strengthening of absorbent mineral substrates such as gypcrete or porous concrete, etc.
- Priming existing surfaces with well-bonded residues of smoothing compounds or water-soluble adhesives (e.g. sulphite adhesives)
- Moisture mitigation on moisture resistant substrates such as concrete up to a residual moisture vapor emission of 7 lbs. Calcium Chloride reading.
- Priming moisture-sensitive surfaces such as plywood, OSB, gypcrete, lightweight concrete, etc.
- Residential, commercial and industrial applications
- Radiant Heat floor systems (priming only, not for moisture mitigation)

Product Properties

Ready to use fast-dry primer and moisture mitigation product for residential and commercial use.

Composition: Moisture-cured, modified polyurethane pre-polymers.

Features	Benefits
• Ready to use one component product.	• No mixing required/minimal waste
• Dries in 40 to 90 minutes	• Allows for time-saving glue-down applications for wood flooring on absorbent substrates. Wood flooring may be installed with UZIN MK 92 S, UZIN MK 95, UZIN MK 97, or UZIN MK 100 as soon as the primed surface can be walked on.
• Strengthens gypcrete substrates	• Excellent for priming over radiant heat floor systems embedded in gypcrete
• Low viscosity	• Easy roller or trowel application and excellent surface penetration
• Moisture-cured, modified polyurethane pre-polymers.	• Very rapid hardening and excellent surface penetration.
• Water-free, solvent free	• Very fast drying
• Meets EMICODE EC 1 R	• Very low emission – may qualify for LEED points

Technical Data

Packaging:	Plastic container: 2.6 Gals.
Shelf life:	minimum 6 months
Color:	brown
Working temperature:	minimum 60°F (16°C) at floor level (60 to 80°F [16-27°C] on radiant heat systems)
Coverage Rate:	approx. 500 sq. ft. per gallon / 1,300 sq. ft. per pail (depending on substrate porosity)
Curing times:	Absorbent surfaces: 40 – 90 min* Dense surfaces: 60 – 150 minutes*
VOC content:	VOC compliant –VOC does not exceed 15 grams per liter, Contributes to LEED credit in section 4.1 (indoor air quality)

* 70°F (21°C) and 65 % relative humidity and dependent on application quantity.

1-Component PU Rapid Primer/ Moisture Barrier

UZIN® INTELLIGENT RESOURCES

UZIN PE 414 Turbo Directions for Use:

Substrate Preparation:

The substrate must be sound, clean and free from materials that would impair adhesion. Remove weakly-bonded or soft surface areas, e.g. curing agents, loose residues of adhesives, smoothing compounds, coverings or coatings, etc. by brushing, abrading, grinding or shot-blasting.

Thoroughly vacuum off any loose material and dust. Always allow primers to dry /cure thoroughly.

Refer to UZIN Product Data Sheets for other products compatible with UZIN PE 414 Turbo.

Application:

1. Before use, allow containers to come to room temperature and shake well. Pour the contents into a clean, oval bucket for easy roller application.
2. Apply a thin, even coat of primer using the UZIN Nylon Fiber Roller, UZIN Foam Roller. Avoid any pooling. Too heavy of an application or "pooling" will cause PE 414 to not cure or seriously retard the curing time.
3. When priming for wood floor installations the wood flooring must be installed within 48 hours of the PE 414 application. PE 414 Turbo can be used to prime for solid or engineered wood floor glue-down applications using UZIN MK 97, UZIN MK 95, UZIN MK 92S or UZIN MK 200. On porous substrates such as gypcrete, a minimum of 2 coats are recommended.
4. To strengthen highly absorbent surfaces that are not adequately sound or ready for a glue-down installation, UZIN PE 414 Turbo may be applied in 1 to 2 coats using the UZIN Nylon Fiber Roller to enhance the substrate surface integrity.
5. If leveling compound is to be used on top of the UZIN PE 414 Turbo application, you must cast sand over the last coat application while wet at the rate of approx. 25 lbs. per 100 sq. ft. (Use 0.01 – 0.03 clean, washed, dry sand for this application to assure the mechanical bonding of the leveling material.) *The 2nd or final coat of PE 414 primer must be completely covered with sand).*
6. When dry, brush and vacuum off any loose sand.

   SPECIAL NOTE FOR COMMERCIAL APPLICATIONS: If the primer is intended to be used for moisture mitigation for residual moisture on concrete substrates it is always recommended to apply a minimum of 2 coats of UZIN PE 414 Turbo.
7. Clean tools immediately after use with mineral spirits. Hardened material can only be removed by mechanical means.

Coverage Rate:

Substrate	Application Equipment	Drying time per coat	Spread rate
Dense to slightly absorbent surfaces, e.g. concrete substrates prior to direct bonding with reaction resin adhesives	UZIN Foam Fiber roller Squeegee	40-90 mins 30-50 mins	approx. 500 sq. ft. per gal/1,300 ft. per unit
Absorbent surfaces, e.g. gypcrete substrates	UZIN Nylon Fiber Roller	40 – 60 mins	approx. 500 sq. ft. per gal
Existing surfaces with well-bonded adhesive residues	UZIN Foam Roller	60 – 90 mins	approx. 500 sq. ft. per gal

Recommended Application Tools

UZIN Nylon Roller: Part #9394
UZIN Foam Roller: Part #1994
UZIN Roller Handle: Part #12494
UZIN Telescoping Extension Pole: Part #12503

Important Notes:

- Shelf life minimum 1 year in original containers when stored in relatively cool conditions. Tightly re-seal opened containers and use as quickly as possible. Before use, allow to come to room temperature.
- Optimum ambient installation conditions are 64 – 77°F (18 – 25°C) with floor temperature above 60°F (16°C). Low temperatures lengthen, while high temperatures shorten the dry/curing time.
- On highly absorbent surfaces, the application of a second coat should be considered in preliminary calculations.
- Direct bonding with reaction resin adhesives must follow within 48 hours after application of the primer. After 48 hours of dry time it is recommended to abrade surface with 40-60 grit abrasive to improve adhesion.
- In the case of moisture values higher than 7 lbs (Calcium Chloride) for wood floors, and 90% RH for all other flooring, use 2-Component Epoxy Primer-Sealer UZIN PE 480.
- The following standards, regulations and notices are applicable and especially recommended:
  - ASTM F 710-08 "Construction of concrete slabs to receive resilient flooring"
  - ASTM C 109 modified "Test method for compressive strength of hydraulic cement mortars"
  - ASTM F 1869-04 "Measuring moisture vapor emission rate of concrete subfloors using Anhydrous calcium chloride"
  - ASTM F 2170-02 "Determining moisture humidity in concrete floor slabs using in-situ probes"

Protection of the Workplace and the Environment:

1-component solvent free Polyurethane Primer, with a VOC content less than 15 grams per liter. Suitable as a substitute material for high solvent content primers used for hardwood flooring.

PRECAUTIONS:

CAUTION: Contains diphenylmethane-diisocyanate. Keep out of reach of children. Keep container closed during storage. Harmful on inhalation. Irritating to eyes, respiratory system and skin. May cause sensitization by inhalation and skin contact. Avoid contact with eyes and skin. Use barrier cream, protective gloves and safety-goggles. Provide good ventilation. After contact with skin, wash immediately with plenty of water and soap. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Observe safety information on product label as well as material safety data sheet. Once cured, presents no physiological or ecological risk. Does not contaminate the indoor air quality with either formaldehyde or other volatile compounds. EMICODE EC 1 R – very low emission.

Observe safety information on product label as well as material safety data sheet (MSDS). Once cured, has a neutral odor and presents no physiological or ecological risk. EMICODE EC 1 R – very low emission.

DOT UN-Number: Not regulated
Hazard Class/PG: Not regulated

Disposal:

Disposal should be in accordance with local, state and federal regulations. Where possible, collect product residues and re-use. Do not allow into drains, waterways or landfill. Empty plastic or metal containers are recyclable.

The above information is based on our experience and testing. UFLOOR Systems is not responsible for the variety of associated materials and variable construction and working conditions that occur on jobsites. The quality of your work depends on your own professional judgment and product usage. If in doubt of any application recommendation or instruction, conduct a small test or obtain technical advice. Observe the installation recommendations of the floor covering manufacturer. The publication of this Product Data Sheet invalidates all previous Product Information.