



Nu-Klad 814B

Solvent Free High Build Epoxy Coating

Product Data/ Application Instructions

- **High build floor coating**
- **Excellent wear and chemical resistance**
- **Smooth, cleanable surface**

Typical Uses

Nu-Klad 814B is a solvent free epoxy based coating used for the protection of concrete floors in the food and beverage industry, industrial and commercial warehouses, (nuclear) power plants and other locations where a heavy duty smooth and easy cleanable floor topping is required.

Resistance

Nu-Klad 814B has excellent wear resistance and provides a smooth finish. Nu-Klad 814B is easily cleaned from dirt and grease, resisting normal cleaning procedures. Nu-Klad 814B is resistant to splash and spillage of a wide range of industrial chemicals and cleaning agents.

Physical Data

Finish	smooth and glossy
Colour	see standard colour list
Components	2
Mixing ratio (by weight)	
resin	8.1 kg
cure	1.9 kg
Curing mechanism	chemical reaction between components
Dry film thickness	250 - 500 µm
Number of coats	1 or 2
Volume solids	100%
Calculated coverage	300 g/m ² (flat and dense concrete; minimum)
	750 g/m ² (rough and porous concrete; minimum)
Allow for application losses, surface irregularities, etc.	
Specific gravity	1.45 kg/l (mixed product)
Flash points	
(Closed Cup).....	°C °F
resin	60 140
cure	60 140
Thinner 90-58	24 75

TYPICAL PROPERTIES

Compressive strength ..	>70 N/mm ²
Flexural strength	>30 N/mm ²
Abrasion resistance	64 mg loss (Taber CS 17, 1000 grams, 1000c)
Dielectric strength	ca 20kV/500 µm

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Application Data Summary

Environmental Conditions

The substrate temperature must be at least 10°C/50°F at the time of application and the material temperature should ideally be between 15 and 25°C (59 and 77°F). The maximum moisture content of the floor should be 4% by weight. If there is a possibility of moisture penetration through a floor, a damp proof membrane must be present. To avoid intercoat adhesion problems the temperature must be at least 3°C/5°F over the dew point during the application period.

Surface Preparation

Concrete and sand-cement screeds must be at least at 28 days old with a minimum compressive strength of 25 N/mm². The substrate has to be free of laitance, oil, grease, dust and other contaminants or loose particles. In order to achieve satisfactorily cleaned substrates, the following preparation techniques might be appropriate:

- grit blasting
- high pressure water blasting
- wet grit blasting
- flame cleaning followed by e.g. steel wire brushing.

For porous absorbent substrates and enhanced performance a penetrating primer should be applied after cleaning (Nu-Klad 813B).

For rough substrates a scrape coat may be necessary. Ask your PPG representative for appropriate advice.

Mixing

Use a power mixer such as ½-inch Jiffy Mud and Resin mixer chucked to a ½-inch drill motor (< 350 rpm). Mix only full units. Thoroughly stir pigmented resin, then blend with cure and mix thoroughly for at least 3 minutes until uniform. Pour mixture into an empty can and mix again to uniformity.

Application Data

Substrate primed or clean and sound concrete

Application methods brush or roller, trowel

Minimum substrate temperature 10°C/50°F

Maximum substrate moisture content 4% by weight

Potlife (at 20°C/68°F) ... 45 minutes

Drying times (at 20°C/68°F)

dry to walk on..... 1 day

hard to light traffic 2 days

fully cured 3 - 4 days

Potlife and drying times are dependent on temperature.

Cleaner Thinner 90-58

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Application procedure

Nu-Klad 814B used as an unblended coating can be applied by brush, roller or trowel (one thick coat up to 1 mm). Do not use under 10°C/50°F.

1. To obtain flat, glossy surfaces
 - 1.1 apply 300 to 400 grams Nu-Klad 814B per m²
 - 1.2 recoat time: between 8 and 24 hours
 - 1.3 apply 300 to 400 grams Nu-Klad 814B per m²
2. To obtain exposed aggregate non skid surfaces
 - 2.1 apply 300 to 400 grams Nu-Klad 814B per m²
 - 2.2 recoat time: between 8 and 24 hours
 - 2.3 apply 300 to 400 grams Nu-Klad 814B per m²
 - 2.4 strew oventried and cleaned sand vertically in the still wet coating, size 0.1-0.3mm or 0.2-0.6mm such as Nu-Klad 830A or Nu-Klad 830B. The surface must be completely covered with the sand, no "glossy" areas should remain.
 - 2.5 after curing of the last coat, the remaining sand can be removed.
3. To obtain covered aggregate non skid surfaces
 - 3.1 apply at least 400 grams Nu-Klad 814B per m²
 - 3.2 strew oventried and cleaned sand vertically in the still wet coating, size 0.2-0.6mm such as Nu-Klad 830B. The surface must be completely covered with the sand, no "glossy" areas should remain
 - 3.3 after curing of the coating, non adherent sand has to be removed
 - 3.4 apply 300 to 400 grams Nu-Klad 814B per m² as a topcoat

Shipping Data

Packaging	
resin	8.1 kg in 10 l can (10 kg unit)
	20.26 kg in 20 l can (25 kg unit)
cure	1.9 kg in 2½ l can (10 kg unit)
	4.74 kg in 5 l can (25 kg unit)
Shipping weight	
10 kg unit	approx. 11.25 kg
25 kg unit	approx. 27.4 kg
Shelf life	1 year from shipment date when stored indoors in unopened, original containers at 5 to 40°C (41 to 104°F).

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Caution

Keep container closed. Use with adequate ventilation. Avoid prolonged and repeated contact with skin. Do not empty into drain. For specific information on hazardous ingredients, required ventilation, possible consequences of contact, and safety measures see Safety Data Sheet.

Safety

Since improper use and handling can be hazardous to health and cause of fire or explosion, safety precautions included with Product Data/Application Instruction and Material Safety Data Sheet must be observed during all storage, handling, use and drying periods.

Warranty

PPG warrants its products to be free from defects in material and workmanship. PPG's sole obligations and Buyer's exclusive remedy in connection with the products shall be limited, at PPG's option, to either replacement of products not conforming this warranty or credit to Buyer's account in the invoiced amount of the non-conforming products. Any claim under this warranty must be made by Buyer to PPG in writing within five (5) days of Buyer's discovery of the claimed defect, but in no event later than the expiration of the applicable shelf life, or one year from the delivery date, whichever is earlier. Buyer's failure to notify PPG of such non-conformance as required herein shall bar Buyer from recovery under this warranty.

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All our transactions are subject to our Terms and Conditions of Sale.