

# 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 cure		
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 <sup>2</sup> (flat and dense concrete minimum) 750 g/m <sup>2</sup> (rough and porous concrete; minimum)	
Allow for application losses, surface irregularities, etc.		
Specific gravity	1.45 kg/l (mixed product)	
Flash points (Closed Cup)resin cure	°C °F 60 140 60 140 24 75	

#### **TYPICAL PROPERTIES**

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## **Application Data Summary**

**Environmental Conditions** 

The substrate temperature must be at least 10°C/50°Fat 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/mm<sup>2</sup>. 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 Ameron 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 onhard to light trafficfully cured	2 days 3 - 4 days
Cleaner	Amercoat 12

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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 m<sup>2</sup>
  - 1.2 recoat time: between 8 and 24 hours
  - 1.3 apply 300 to 400 grams Nu-Klad 814B per m<sup>2</sup>
- 2. To obtain exposed aggregate non skid surfaces
  - 2.1 apply 300 to 400 grams Nu-Klad 814B per m<sup>2</sup>
  - 2.2 recoat time: between 8 and 24 hours
  - 2.3 apply 300 to 400 grams Nu-Klad 814B per m<sup>2</sup>
  - 2.4 strew ovendried 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 m<sup>2</sup>
  - 3.2 strew ovendried 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 m<sup>2</sup> as a topcoat

## **Shipping Data**

Packaging resin	8.1 kg in 10 l can (10 kg unit)
cure	20.26 kg in 20 l can (25 kg unit) 1.9 kg in 2½ l can (10 kg unit)
	4.74 kg in 5 I can (25 kg unit)
Shipping weight 10 kg unit25 kg unit	approx. 11.25 kg 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

Ameron warrants its products to be free from defects in material and workmanship. Ameron's sole obligations and Buyer's exclusive remedy in connection with the products shall be limited, at Ameron'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 Ameron 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 Ameron of such non-conformance as required herein shall bar Buyer from recovery under this warranty.

Ameron makes no other warranties concerning the product. No other warranties, whether express, implied or statutory, such as warranties of merchantability or fitness particular purpose, shall apply. In no event shall Ameron be liable for consequential or incidental damages. Any recommendations or suggestion relating to the use of the products made by Ameron, whether in its technical literature, or response to specific enquiry, or otherwise, is based on data believed to be reliable; however, the products and information are intended for use by Buyer's having requisite skill and knowhow in the industry, and therefore it is Buyer to satisfy itself of the suitability of the products for its own particular use and it shall be deemed that Buyer has done so, as its sole discretion and risk. Variation in environment, changes in procedures of use, or extrapolation of data may cause unsatisfactory results.

#### **Limitation of Liability**

Ameron's liability on any claim of any kind, including claims based upon Ameron's negligence or strict liability, for any loss or damage arising out of, connected with, or resulting from the use of the products, shall in no case exceed the purchase price allocable to the products or part thereof which give rise to the claim.

In no event shall Ameron be liable for consequential or incidental damages.

Due to Ameron's policy of continuous product improvement, the information contained in this Product Data/Application Instructions sheet is subject to change without notice. It is the Buyer's responsibility to check that this issue is current prior to using the product. For the most up-to-date Product Data/Application Instructions always refer to the Ameron Performance Coatings & Finishes website at www.amerondirect.co.uk

To avoid any confusion that may arise through translation into other languages, the English version of the Product Data/Application Instructions will be the governing literature and must be referred to in case of deviations with product literature in other languages.

#### **Condition of Sale**

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

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