



AMERON
INTERNATIONAL

Performance Coatings & Finishes

Nu-Klad® 100A

Spray-on epoxy surfacer

Application Instructions

Refer to Product Data Sheet for properties and uses. Adhere to all instructions, precautions, conditions and limitations during storage, handling, application and drying periods to obtain the maximum performance. For conditions outside the requirements or limitations described, contact your Ameron representative.

Environmental Conditions

Temperature	°F	°C
air	32 to 90	0 to 32
surface	32 to 100	0 to 38

Surface temperatures must be at least 5°F (3°C) above dew point to prevent condensation.

Material conditions – Store material between 65 to 90°F for 48 hours prior to use. Material below 65°F becomes difficult to handle and could cause spray equipment to break down. Above 80°F the working time decreases. Surface roughness and surface temperature will influence flow, below 70°F additional thickness will improve surface smoothness.

Surface Preparation

Refer to concrete surface preparation for primer or filler being used. Coating performance is, in general, proportional to the degree of surface preparation.

The primed or filled concrete surface must be clean, dry and free of contaminants such as dust, dirt, grease, or oil. Nu-Klad 100A must be applied over Nu-Klad 105A primer/sealer, or recommended primer. Nu-Klad 105A may be wet (tacky) or dry. Apply Nu-Klad 100A as follows after applying Nu-Klad 105A.

	°F/°C		
	90/32	70/21	50/10
within (days)	3	7	10

On poured concrete walls and overhead surfaces, fill voids using Nu-Klad 114A filler compound before applying Nu-Klad 100A. Nu-Klad 114A which has cured beyond 3 days must be roughened. Nu-Klad 100A which has cured beyond 7 days must be roughened before applying additional 100A.

Equipment

The following equipment is recommended; other equipment which provides a proper application may be used:

- Moyno pump equipped with a hopper, variable-speed air motor and spray guns with material lines such as "Super Texan B" modified for epoxy surfacers.
- Quikspray Carrousel pump equipped with a hopper, spray gun and material lines, Model No. 1025GFC-3-GAM.
- Bottom feed pressure pot with pole gun, such as Binks 10-gal pressure pot, Model No. 83-5362, with follower plate and air control 83-104, fluid hose 71-3362-1 inch, pole gun model 125 with 49 x 1/2 fluid nozzle.
- For small or repair areas, use a hand held hopper gun, such as Quikspray Model 60AT.

Mixer – Such as Jiffy Mud and Resin Mixer or Foldstir Mixer, each with 1/2-inch shaft and a suitable power drill.

Mixing Procedure

Nu-Klad 100A is supplied in the correct proportions of resin, cure and powder which must be mixed together before use. See Application Procedure. Mix only full units. Make no additions or deletions. Deviations from packaged components will inhibit curing and alter final physical properties. Nu-Klad 100A is ready for use immediately after mixing; no induction time is required. Do not mix more material than can be used within the working time; 2 hours at 70°F. Material which has begun to set is unsatisfactory and must be discarded.

Accelerator Guide

	°F/°C				
Material temperature	50/10	40/4	32/0		
862 amount (pts)	1	2	3		
Pot life (hours)	°F/°C				
	90/32	70/21	50/10	40/4	32/0
normal	1/2	1	2	–	–
accelerated – 1 pt	–	1/2	1	–	–
– 2 pt	–	–	1	3	–
– 3 pt	–	–	–	2	3

- Add cure to resin and stir thoroughly.
- Continue to stir resin/cure mixture while adding powder. Mix thoroughly using a power mud mixer with explosion-proof power drill.

Application Procedure

- Mix a unit of resin and cure for lubricating the material line as per general mixing procedure. (Do not add powder).
- Pump lubricant material through pump and delivery hose collecting material in a 5-gallon can. Continue pumping until all lubricant (resin and cure) is removed from material line, follow lubricant material with a mixed unit of resin, cure and powder; then begin application of the 3-component mixed Nu-Klad 100A.

Note: Add unit powder to collected lubricant material immediate and mix thoroughly before spraying this material. Use mixed material immediately.

- Spray in even, parallel passes; overlap each pass 50 percent to avoid holidays, bare areas and pinholes. Cross spray at right angles to first pass until specified thickness is achieved.

	°F/°C				
Setting time (hours)	90/32	70/21	50/10	40/4	32/0
normal	8	28	56	–	–
accelerated – 1 pt	–	12	24	41	78
– 2 pt	–	–	16	35	60
– 3 pt	–	–	–	30	52

- Periodically check during application for specified thickness with a steel rule depth gauge or other suitable wet film thickness gauge.
- At surface temperatures of 80°F or above, two coats of Nu-Klad 100A may be required to achieve 3/16 inch thickness on vertical surfaces. Make the first application at 1/8 inch (3mm) and allow to cure overnight at 70°F. Make second application at 1/16 inch (1.5mm) and within 24 hours after first application.

	°F/°C				
Time before service @ 1/8 in (3mm) (days)	90/32	70/21	50/10	40/4	32/0
normal	1	3	10	–	–
accelerated – 1 pt	–	2	6	–	–
– 2 pt	–	–	5	12	18
– 3 pt	–	–	–	10	14

6. Clean equipment with Amercoat 104 immediately after use.

Cleanup

Immediately after use, clean all application tools and spray nozzle with Amercoat 104 cleaner followed by a clean water rinse. Clean pump by pouring a unit of Amercoat 104 cleaner into hopper following Nu-Klad 100A and run through until Nu-Klad 100A is removed from material line. Pour a second unit of Amercoat 104 cleaner into the hopper and continue circulating to remove any remaining 100A. Follow with a clean water rinse. For thorough cleaning of material line, disassemble and clean by attaching a rag to a piece of wire and pulling rag through the line several times to remove any loose deposits from the side walls. Flush with water. A spare material line is recommended so one line can be thoroughly cleaned while the other is in use. Utilizing two lines will ensure that each day's production begins with a clean line and also allow for close inspection of the lines for wear.

Repair

Reapply over clean surface up to 7 days. Roughen surface after 7 days.

Safety Precautions

Read each component's material safety data sheet before use. Mixed material has hazards of each component. Safety precautions must be strictly followed during storage, handling and use.

CAUTION – Improper use and handling of this product can be hazardous to health.

Do not use this product without first taking all appropriate safety measures to prevent property damage and injuries. These measures may include, without limitation: implementation of proper ventilation, use of proper lamps, wearing of proper protective clothing and masks, tenting and proper separation of application areas. Consult your supervisor. Proper ventilation and protective measures must be provided during application and drying to keep spray mists and vapor concentrations within safe limits and to protect against toxic hazards. Necessary safety equipment must be used and ventilation requirements carefully observed, especially in confined or enclosed spaces, such as tank interiors and buildings.

This product is to be used by those knowledgeable about proper application methods. Ameron makes no recommendation about the types of safety measures that may need to be adopted because these depend on application environment and space, of which Ameron is unaware and over which it has no control.

If you do not fully understand these warnings and instructions or if you cannot strictly comply with them, do not use the product.

Note: Consult Code of Federal Regulations Title 29, Labor, parts 1910 and 1915 concerning occupational safety and health standards and regulations, as well as any other applicable federal, state and local regulations on safe practices in coating operations.

This product is for professional use only. Not for residential use.

Warranty

Ameron warrants its products to be free from defects in material and workmanship. Ameron's sole obligation and Buyer's exclusive remedy in connection with the products shall be limited, at Ameron's option, to either replacement of products not conforming to this Warranty or credit to Buyer's account in the invoiced amount of the nonconforming 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 nonconformance 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 for a particular purpose, shall apply. In no event shall Ameron be liable for consequential or incidental damages.

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Ameron U.S.A. • 13010 Morris Rd, Suite 400, Alpharetta, GA 30004 • (678) 393-0653
Ameron B.V. • J. F. Kennedylaan 7, 4191 MZ Geldermalsen, The Netherlands • (31) 345-587-587