



**AMERON**  
INTERNATIONAL

Performance Coatings & Finishes

# Tideguard® 171A

*Spray-on epoxy cladding*

## Application Instructions

Refer to the Product Data Sheet for properties and uses.

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

### Surface Preparation

Coating performance is, in general, proportional to the degree of surface preparation. Round off all rough welds and sharp edges, remove weld spatter. Prior to coating, all surfaces must be clean, dry and free of all contaminants, including salt deposits.

**Steel** – Abrasive blast SSPC-SP 10. Blast to achieve an average 3-mil (75-micron) anchor profile as determined with a Keane-Tator Surface Profile Comparator or similar device.

### Application Equipment

The following equipment is recommended; other equipment which provides a proper application may be used. Changes in pressure, hose and tip size may be needed for proper spray characteristics.

1. 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.
2. Quikspray Carrousel pump equipped with a hopper, spray gun and material lines, Model No. 1025GFC-30-GAM.
3. Bottom feed pressure pot with pole gun, such as Binks 10-gallon 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.
4. For small or repair areas use a hand held hopper gun such as Quikspray Model 60AT.

Use a power mud mixer with suitable power drill such as Jiffy Mud and Resin Mixer or Foldstir Mixer, each with 1/2-inch shaft.

### Environmental Conditions

Optimum temperatures for handling and use of Tideguard 171A are between 65 to 90°F (18 to 32°C). Store material within this range for 48 hours prior to use. Handling material that is below 65°F (18°C) becomes difficult and could cause a breakdown in the spray equipment. Above 80°F (27°C) the working time decreases. Surface roughness and surface temperature will influence flow, at temperatures below 70°F (21°C) additional thickness will improve surface smoothness.

## Mixing Procedure

Tideguard 171A is supplied in a 53.4 pound unit as follows: cure in a 1-gallon can, resin in a 5-gallon can and powder in an EnviroPac™. Mix only full units. Make no additions or deletions. Any deviations from the packaged components will inhibit curing and alter final physical properties. Tideguard 171A 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; 1 hour at 70°F (21°C). Material which has begun to set is unsatisfactory and must be discarded.

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

## Application Procedures

Tideguard 171A is packaged as a 53.4 pound unit in correct proportions of cure, resin and powder which must be mixed together before use.

1. Mix a unit of resin and cure for lubricating the material line as per general mixing procedure. (Do not add powder).
2. 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 (resin, cure and powder) then begin application of the 3-component mixed Tideguard 171A.

*Note: Add unit powder to collected lubricant material and mix thoroughly before spraying this material.*

3. 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.

Working time (hours)	°F/°C		
	90/32	70/21	50/10
normal	1/2	1	–
accelerated (Amercoat 861)	–	1/2	1

Initial setting time (hours)	°F/°C		
	90/32	70/21	50/10
normal	5	10	–
accelerated (Amercoat 861)	–	8	24

4. Periodically check during application for specified thickness with a steel rule depth gauge or other suitable wet film thickness gauge.
5. At surface temperatures of 80°F (26°C) or above, two coats of Tideguard 171A may be required to achieve 3/16" (5mm) thickness on vertical surfaces. Make the first application at 1/8" (3mm) and allow to cure overnight at 70°F (21°C). Make second application at 1/16" (1.5mm) and within 24 hours after first application.
6. For low temperature it will be necessary to add Amercoat 861 Accelerator to a mixed unit of Tideguard 171A.

Temperature		Amount 861
°F	°C	
56-70	13-21	1/4 pint
40-55	4-13	1 pints

7. Check dry thickness of Tideguard using a dry thickness gauge such as Mikrotest, Model No. S1-10.
8. When a pinhole-free coating is required, check continuity of dry, but uncured coating with a nondestructive holiday detector such as a Tinker-Rasor model AP at approximately 15,000 volts. Select proper voltage depending on thickness and condition of surface. (NACE Standard RP-02-74 Recommended Practice High Voltage Electrical Inspection of Pipeline Coating Prior to Installation).

Time before service (days)	°F/°C	
	70/21	50/10
normal	3	10

9. Tideguard may receive water contact right after application; however, the wet coating should be protected from washing action which could remove the film while it is still wet.
10. Clean equipment with Amercoat 104 immediately after use.

## Ready For Service

Tideguard 171A may receive still water contact right after application, however wet cladding should be protected against washing action.

## Cleanup

Immediately after use, clean all application tools and spray nozzle with Amercoat 104 cleaner followed by a clean water rinse. Clean the pump by pouring a unit of Amercoat 104 cleaner into the hopper following the Tideguard 171A and run through until Tideguard is removed from the material line. Pour a second unit of Amercoat 104 cleaner into the hopper and continue circulating to remove any remaining Tideguard. Follow with a clean water rinse. For thorough cleaning of the material line, disassemble and clean by attaching a rag to a piece of wire and pulling the rag through the line several times to remove any remaining loose deposits from the side walls. Flush with water. A spare material line is recommended so that 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 allows for close inspection of the lines for wear.

## Repair

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

Low thickness areas – Sweepblast and apply Tideguard 171A to specified thickness.

Holidays or damage down to steel – Blast steel in accordance with instructions under surface preparation and roughen overlap areas. Reapply Tideguard 171A.

Rough or porous appearing areas – Remove porous or rough Tideguard by grinding or blasting. Check with a holiday detector, and if no holidays are noted, reapply Tideguard. If holidays are present, follow the specific instructions listed above.

## 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 mist 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 interior 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 industrial 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 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 nonconformance as required herein shall bar Buyer from recovery under this Warranty.

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