

# AquataPoxy A-7



## DESCRIPTION

AquataPoxy® A-7 is a solvent-free, 100% solids, corrosion resistant epoxy grout that can be applied to dry, wet or underwater surfaces. Formulated for a broad range of corrosion protection, water resistance and certified safe for potable water.

## TYPICAL USES

- Fill large cracks, voids and pockmarks
- Potable water tanks, reservoirs and basins
- Secondary containment
- Patch small holes
- General maintenance
- Touch-up and underwater repairs

## COLOR

The standard Part A Resin is white; the Part B Curing Agent is brown. When mixed the product is an off-white color.

## SOLIDS BY VOLUME

As supplied, solids by volume: 100% solids  
Volatile Organic Compounds: 0.0 pounds per gallon

## FILM THICKNESS

AquataPoxy A-7 is a 100% solids epoxy with zero shrinkage. Wet film thickness and dry film thickness are the same (i.e. 5 mils WFT = 5 mils DFT). Depending on substrate type and profile, a maximum of 500 mils of A-7 per coat is recommended to prevent sagging.

ANSI/NSF 61 maximum dry film thickness for tanks 1,000 gallons or larger: 80 mils.

## COVERAGE

Theoretical coverage is 40 square feet per gallon at 40 mils wet film thickness. Actual surface coverage will depend on substrate porosity and roughness. Good painting practices suggest application of two coats for quality assurance. A wet film thickness gauge may be used to determine actual coating coverage.

## SURFACE PREPARATION

Prior to coating, the substrate must be prepared in a manner that provides a uniform, clean, sound, neutralized surface suitable for the specified coating. The substrate must be free of all contaminants, such as oil, grease, rust, scale or deposits. Coating performance is proportional to the degree of surface preparation.

**STEEL** surfaces may require "Solvent Cleaning" (SSPC-SP 1) to remove oil, grease and other soluble contaminants. Chemical contaminants may be removed according to SSPC-SP 12/NACE No. 5. Identification of the contaminants along with their concentrations may be obtained from laboratory and field tests as described in SSPC-TU 4 "Field Methods

for Retrieval and Analysis of Soluble Salts on Substrates". Surfaces to be coated should then be prepared according to SSPC-SP 5/NACE No.1 "White Blast Cleaning" for immersion service or SSPC-SP 10/NACE No. 2 "Near White Blast Cleaning" for all other service. In certain situations, an alternate procedure may be to use high (>5,000 psi) or ultrahigh (>10,000 psi) pressure water cleaning or water cleaning with sand injection and an approved rust inhibitor. The resulting anchor profile shall be 2.5-5.0 mils and be relative to the coating thickness specified.

**CONCRETE AND MASONRY** surfaces must be sound and contaminant-free with a surface profile equivalent to a CSP2 to CSP5 in accordance with ICRI Technical Guideline No. 03732. This can generally be achieved by abrasive blasting, shot blasting, high pressure water cleaning, water jetting or a combination of methods. Concrete exhibiting a moisture vapor emission rate greater than 3 lbs/1,000 ft<sup>2</sup>/24 hours (per ASTM F 1869) shall be primed with CM's ConcretePlus 815 waterborne primer before applying A-7.

## MIX RATIO

Part A Resin:Part B Curing Agent mix ratio is 1:1 by volume.

## THINNING

**Do not thin with solvents.** If lower viscosity is needed, heat unmixed material by placing the containers in hot tap water until the desired flow properties are obtained. Drum heaters may be used to heat larger quantities. Unmixed material should not be heated above 150°F.

## MIXING

Individually power mix both Part A and Part B containers, then measure out 1 part of Part A to 1 part of Part B by volume in a clean disposable pail. Use a heavy-duty drill with a Jiffy or Hanson plunge mixer and mix at 500-700 rpm for a minimum of one minute. Scrape the sides and bottom while transferring to a clean pail and continue mixing for at least another minute before application. Properly mixed material will be a uniform color.

## APPLICATION

Apply with brush, trowel, scraper or other suitable method. For best results, apply to concrete when its temperature is stable or falling.

## POT LIFE

The pot life is 40 minutes for one gallon at 72°F. Longer working life is attained by mixing smaller batches and/or using cooler epoxy.

## CURE TIME

Thin film set time varies with substrate temperature and application thickness. Generally, the coating will be tack-free in 5 hours at 72°F and dry-hard in about 7 hours.

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ANSI/NSF 61 cure time before service is 7 days at 77 °F.

## RECOAT TIME

Surfaces repaired with A-7 can be immediately topcoated. For thick topcoats, recoat as soon as it becomes tacky but does not transfer to the finger. When applying multiple coats, do not allow more than 18 hours at 72°F substrate temperature to pass between coats, higher temperatures will shorten this window. Before recoating; inspect, clean and dry surface thoroughly to remove all contamination, including amine blush or condensation. If the recoat time is missed, clean and abrade surfaces prior to recoating.

## SUBSTRATE TEMPERATURE

Minimum recommended substrate temperature: 50°F  
Maximum recommended substrate temperature: 120°F

## TEMPERATURE RESISTANCE

Maximum recommended dry temperature: 200°F. Wet temperature resistance depends on chemical concentration and exposure time.

## CLEAN UP

Use acetone, MEK or xylene to clean tools. Wash immediately and thoroughly with soap and water to clean skin. Refer to the Material Safety Data Sheet for additional information on health and safety.

## AVAILABLE PACKAGES

Available in pints (quart kit), one gallon pails (2 gallon kit) and 5 gallon pails (10 gallon kit). Kits are supplied in the correct proportions of A & B; these two components must be mixed together before use.

## SHELF LIFE AND STORAGE

Product shelf life is 1 year from purchase date in sealed, unmixed containers, stored in a sheltered area between 60°F and 80°F (15°C and 27°C).

## SAFETY

Read the product's Material Safety Data Sheet (MSDS) for health and safety information before using. Strictly follow all notices on the MSDS and container label. If you do not fully understand the notices and procedures provided on the MSDS or if you cannot strictly comply with them, do not use this product. Actual safety measures are dependent on application methods and work environment. The MSDS is available online at [www.cohesantmaterials.com](http://www.cohesantmaterials.com).

## CERTIFICATIONS

**Potable Water:** AquataPoxy A-7 is certified to the requirements of ANSI/NSF 61 - Drinking Water System Components.

## PERFORMANCE TESTING

DESCRIPTION	METHOD	RESULT
Tensile Strength	ASTM D 638	3,700 psi
Tensile Ultimate Elongation	ASTM D 638	1.4%
Compressive Strength	ASTM D 695	4,275 psi
Flexural Strength	ASTM D 790	6,080 psi
Hardness, Shore D	ASTM D 2240	85
Adhesion, Concrete	ASTM D 4541	Substrate Failure
Adhesion, Steel (SSPC-SP 10)	ASTM D 4541	1,900 psi

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