

3333 Richard Arrington Jr. Blvd. N Birmingham, AL 35234



# Perma-Clean 100

NSF 61/600 Ceramic Epoxy Tank Lining

#### **General Information**

**Description** NSF 61/600 potable water tank lining; Plural applied 100% solids ceramic epoxy.

Permaclean 100 may be used as a liner for steel or concrete water tanks and may also be specified for immersion service in treatment plant services such as clarifiers or aeration

basins

**Generic Type** Polyamidoamine Epoxy

AWWA D102 ICS-5

Available Colors Blue and White, all colors share a common part A

WATER QUALIT

#### **Available Kit Sizes**

Α	45 gallons	5 gallons	300 mL cartridge
В	45 gallons	5 gallons	300 ml cartridge
Total Kit Volume	90 gallon kit	10 gallon kit	600 mL cartridge kit

#### NSF 61/600

For use with tanks greater than or equal to 500,000 gallons, not exceeding a surface area to volume ratio of 4.6 cm<sup>2</sup>/L. Minimum Re-coat/Final Cure Time/temp prior to water immersion: 72 hours at 60 deg F, up to 150 mils DFT

#### **Performance Testing**

ASTM D2794 Direct Impact	80 in·lbs
ASTM D4541 Adhesion to Ceramaprime primer	1900 psi at 30 day
ASTIVI D4341 Adriesion to Ceramaprime primer	primer cure
NACE TM0174 Water Immersion at 120°F	3 years no effect
NACE TM0174 Water Immersion at 75°F	3 years no effect
NACE TM0174 Water Immersion in 1% sodium hypochlorite	1 year, only color loss
ASTM B117 Salt Fog	10,000 hrs no effect

#### **Compatible Primers**

Ceramaprime, Ceramaprime LV, Ceramaprime CC, Indurazinc MC-67, PE-70, *direct to metal* 

#### **Surface Preparation**

All substrates clean and dry, free of dirts, oils, greases and contaminants

Carbon Steel	Abrasive blast to SSPC SP-10 with a 1-3 mil profile	
Concrete	Abrasive blast as per SSPC SP-13 to an ICRI CSP 3 or	
	greater. Can be applied over Mortarchem and EFS 707	
Repairs, small areas	s SSPC SP-11 power tool to bare metal to produce an	
	angular profile	

#### **Shelf Life & Storage**

2 year shelf life parts A and B, Store long term between 35 and 90°F, Recommend heating material to 80-85°F in the 24 hours prior to application

# Perma-Clean 100

# **Application Information**

#### **Film Thickness**

	minimum	maximum
wet film	15 mils	50 mils
dry film	15 mils	50 mils

## **Coverage Rate**

 $1604 \text{ ft}^2/\text{gal at 1 mil}$   $45 \text{ ft}^2/\text{gal at 35 mils}$ 

# **Application Instructions**

Plural Airless Spray	Remove all filters from spray system, use Graco XP-70 or equivalent heated plural spray unit with heated hose bundle and in-line static mixer. 0.027-0.031 spray tip. Heat A and B components to between 90 and 110°F and spray at minimum line pressure to achieve fan
Cartridge Repair Kit	Tape off-area to be repaired, pump cartridge five times into a waste cup to initiate mixing prior to applying material to substrate. See cartridge repair kit data sheet.
Brush and Roll	Recommended for small areas only

# Mix-Ratio

1:1 by volume A:B

**Pot Life** 

50ºF	75ºF	90ºF
30 mins	15 mins	5 mins

# Thinning

Do not thin, use K-1070 or K-1034 for cleanup

## **Conditions**

All steel temperatures must be ≥5°F above the dewpoint, ambient temperatures ≥50°F

	minimum	maximum
Substrate temperature	50ºF	140 ºF
Material temperature	90ºF	120ºF
Humidity	0% RH	95% RH

#### Cure

	35ºF	50ºF	75ºF	90ºF
dry to handle	heat to 50ºF	6 hrs	3 hrs	1 hr
dry to topcoat	heat to 50ºF	12 hrs	8 hrs	5 hrs
cured for water immersion	heat to 50ºF	7 days	24 hrs	24 hrs
cured for NSF 600 service	heat to 60ºF	heat to 60ºF	72 hrs	72 hrs

### Reference

## **Physical Properties**

HAPS	0 g/L
VOC	13 g/L
volume solids	100%
weight solids	100%

Links Safety Data Sheet

Cartridge Repair Kit Tech Data Sheet

Ceramaprime Data Sheet

Indurazinc MC 67 Data Sheet

**Induron Water Tank Coatings Page** 

<u>UL NSF-61/600 Listing for Perma-Clean 100</u>