

Amercoat® 114A

Epoxy filler compound

Product Data/ Application Instructions

• Filler for steel, formed concrete or concrete block
Amercoat 114A is a 100% solids epoxy filler compound to fill holes, voids and surface discontinuities in steel, formed concrete or concrete block up to one inch across as measured in their largest dimension. A single application will fill or seal most air bubbles and holes. On concrete block surfaces, Amercoat 114A provides a smooth surface in a single application for applying coatings.

• Amercoat 114A may be used to fill pits, voids, or seams in steel or concrete water tanks. For potable water tanks, topcoat with an ANSI/NSF Standard 61 - approved potable water tank lining.

Typical Uses

Steel and concrete surfaces in :

- Nuclear facilities
- Plants – fossil fuel, sewage and waste treatment, food and beverage, chemical processing
- Mills – pulp and paper, textile, steel
- Mining and metal finishing operations
- Water tanks

Typical Properties – after 7 days @ 70°F (21°C)

Mechanical

Density (ASTM D71 modified)	88.6 lbs/ft ³
Tensile strength (ASTM D412)	3000 psi
Compressive strength (ASTM C579)	12549 psi
Modulus of elasticity (ASTM C580)	9.4 x 10 ⁵ psi

Qualifications

ANSI/NSF Standard 61 - for use in drinking water

- Maximum Surface Area / Volume - 0.033 in²/L or maximum 1% of a 4000 gallon tank or larger
- Maximum Use Temperature - 23°C



Physical Data

Color	Off-white	
Components	2	
Curing mechanism	Chemical reaction between components	
Volume solids	100%	
Theoretical coverage	ft ² /unit	
1 mil (25 microns)		
3 lb unit	406	
20 lb unit	2709	
VOC	lb/gal	g/L
mixed	0.0	0.0
Flash point (SETA)	°F	°C
114A cure	>200	93
114A resin	>200	93
Amercoat 12	2	-17
Amercoat 928	175	79

Application Data

Applied over	Prepared or primed steel, concrete, masonry block		
Surface preparation			
steel	Abrasive blast		
concrete	ASTM D4258, 4259 or 4260		
masonry	ASTM D4261		
Primer	Amerlock Sealer		
Method	Squeegee, roller, trowel, spatula		
Mixing ratio (by volume)	1.84 parts resin to 1 part cure		
	90/32	70/21	50/10
Working time (hours)	1	2 ^{1/2}	4
Initial setting	9	18	36
Curing time before topcoating			
minimum	9	18	36
maximum			
with 114A	36	72	144
with 100A	72	168	336
with Amercoat 90HS	1 month		

If maximum recoat time exceeded, roughen surfaces.

Environmental conditions

Temperature	°F	°C
material and surface	50 to 120	10 to 27

Below 65°F (18°C) workability is reduced and application more difficult. Above 80°F (27°C) working time decreases.

Amercoat 114A can be applied to surfaces as low as 50°F (10°C); although curing retarded, typical properties of cured material will not be affected.

Application under direct sunlight and rising surface temperatures can result in bubbling of filler compound by release of air or moisture from concrete. Prior to application of Amercoat 114A shade for 24 hours any concrete exposed to direct sunlight and keep shaded until after initial set. With rising surface temperatures it may be necessary to postpone application.

Equipment cleaner Amercoat 12 or 928

Surface Preparation

Coating performance, in general, is proportional to the degree of surface preparation. Prior to coating, all surfaces must be clean, undamaged, dry and free of all contaminants, including salt deposits.

Steel – Abrasive blast SSPC-SP10. Prepare surface in accordance with Application Instructions for specific primer being used.

Concrete – Cure concrete a minimum of 14 days and until 80 percent of its physical properties have been attained before applying Amercoat 114A. Prepare surfaces according to ASTM D4258, surface cleaning; D4259, abrading; or D4260, acid etching.

Concrete block – Walls must be laid plumb and square with flush joints. Do not rake joints. All surfaces must be clean and dry following ASTM D4261.

Amerlock Sealer applied over water-cured concrete – Cure to a tack-free condition [6 hours at 70°F (21°C)] before application of Amercoat 114A.

Apply Amercoat 114A over prepared concrete surfaces or surfaces primed with Amerlock Sealer. See primer literature.

Mixing

Amercoat 114A supplied in the correct proportions of resin and cure which must be mixed together before use. Mix only full units. Make no additions or deletions. Any deviations will inhibit curing and alter final physical properties. Do not mix more material than can be used within working time: 2½ hours at 70°F (21°C). Material which has begun to set must be discarded.

Application

Apply Amercoat 114A to the surface using a short nap paint roller or trowel. Spread and work the filler compound across surface filling voids using the American Olean KR Groutmaster epoxy floor trowel or wide bladed putty knives. Continue working filler compound across surface, applying pressure to achieve a smooth finish. Leave only a slight film above the surface plane. Filler compound should appear somewhat transparent allowing the concrete surface or concrete block texture to remain visible.

A single application will provide a suitable surface to receive Amercoat 100A epoxy surfacer or for application of a coating over concrete block. A second application may be required for complete filling and sealing of formed concrete surfaces receiving Amercoat protective coatings. Allow overnight curing at 70°F (21°C), or until first application is firm.

Do not exceed 3 days at 70°F (21°C) before second application. When making second application, use only reasonable pressure to build film thickness to approximately 5 to 10 mils above the surface plane, at the same time remove ridges left during spreading of filler compound by the application tool. Repair all holidays with Amercoat 114A before applying coating.

Cleanup

Clean all mixing equipment and application tools immediately with Amercoat 12 or Amercoat 928.

Coverage

Coverage depends upon the number and size of air bubbles or holes to be filled. The theoretical coverage per 20 pound unit on a smooth, pore-free surface is 2709 ft².

Curing Time Before Topcoating

	90/32	70/21	50/10
Curing time before topcoating			
minimum (hours)	9	18	36
maximum (hours)			
with 114A	36	72	144
with 100A	72	168	336
with Amercoat 90HS	1 month		

If maximum recoat time exceeded, roughen surfaces.

Shipping Data

Packaging units	3 lb	20 lb
cure	1-pt can	½-gal can
resin	1-qt can	2½-gal can
Shipping weight (approx)	3 lb	20 lb
cure	.79	5.28
resin	2.21	14.72

Shelf life when stored indoors at 40 to 100°F (4 to 38°C)
1 year from shipment date

Numerical values are subject to normal manufacturing tolerances and testing variances. Allow for application losses and surface irregularities.

This mixed product is nonphotochemically reactive as defined by the South Coast Air Quality Management District's Rule 102 or equivalent regulations.

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. PPG 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 PPG 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.



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