

# ARCHCO 450 EPOXY

## Two Part Glass Flake Epoxy for Internal Tank Linings

### Description

Archco 450 Epoxy is a high solids two-part glass flake epoxy designed for internal tank linings. The coating has excellent low temperatures cure properties.

### Uses

Corrosion protection for steel tanks and internal pipes in a variety of industries. The coating will protect tanks and piping against crude oil, seawater, wastewater, fuels, solvents, lubricants and acids.

### Features

- High solids - glass flake
- Very low permeability
- Cures at temperatures down to 35°F (2°C)
- Fast dry and set times
- High build up to 40 mils (1016 microns) in one coat
- Excellent adhesion
- Tough abrasion resistance
- Cures under cool and damp climates
- Excellent undercutting resistance
- Good flexibility and impact resistance
- Glass flake reinforced

### Application

All contaminants shall be removed from the steel surface to be coated. Oil and grease should be removed in accordance to SSPC-SP-1. Surfaces shall be free from projections, sharp edges, high points and fillets must be ground smooth including all corners. Prepare surfaces by grit blasting to a clean near white finish, SSPC-SP 10, NACE No. 2 or Sa 2-1/2. Appropriate angular shall be used to achieve a 3 to 5 mil (76 - 127 microns) anchor profile.

For larger areas the Archco 400 Primer/Sealer can be applied at 3 to 5 mils (76 - 127 microns) in thickness. To spray the Archco 450 Epoxy a plural or single leg airless unit can be used. The plural spray unit shall be capable of spraying a fixed ratio at 3:1 by volume and equipped with the minimum heated hoppers, 100 ft. (30.5 m) heated hoses with manifold and static mixer. On the single leg airless unit, it shall be a minimum of 68:1 airless pump. When using an airless unit the Archco 450 should not be thinned more than 5% with Archco Thinner 400E (3 lbs. /1.4 kg per 5 gal. /19 L kit). A wet on wet spray technique should be used to achieve a minimum of 20 mils (508 microns). The coating thickness should be measured using a wet film thickness gauge. For smaller areas and repairs Archco 450 Epoxy brush kits can be used.

For complete application instructions please refer to Archco 450 Epoxy Lining Application Specifications. Consult a Premier Coatings representative for other uses.



# Archco 450 Epoxy

## TECHNICAL DATA

PROPERTIES	VALUE
<b>Solids Content</b>	95%
<b>Minimum Dewpoint/Substrate Differential</b>	Dewpoint +5°F (+3°C)
<b>Minimum Substrate Temperature</b>	35°F (2°C)
<b>Operating Temperature</b>	-4°F (-20°C) to 150°F (65°C)
<b>Dry Film Thickness per coat</b>	10 Mils to 20 Mils (254 - 508 microns)
<b>Theoretical Coverage</b>	64 SF/Gal @ 25 Mils (635 microns)
<b>Spray Equipment Required</b>	Heated Plural Spray Unit / 68:1 Airless
<b>Airless Spray Tip Size</b>	0.027 – 0.031 in. (0.68 - 78 mm)
<b>Shelf Life @ 41°F (5°C) to 110°F (43°C)</b>	18 Months Minimum
<b>Flash Point</b>	225°F (107°C)
<b>Pot Life</b>	
@ 77°F (25°C)	35-40 Minutes
@ 97°F (36°C)	25-30 Minutes
w/ Thinner 400E @ 77°F (25°C)	50-55 Minutes
w/ Thinner 400E @ 97°F (36°C)	35-40 Minutes
<b>Dry to Handle</b>	
@ 35°F (2°C)	72 Hours
@ 50°F (10°C)	36 Hours
@ 77°F (25°C)	10 Hours
@ 100°F (38°C)	6 Hours
<b>Cure for Immersion (Crude Oil)</b>	
@ 35°F (2°C)	7 Days
@ 50°F (10°C)	5 Days
@ 77°F (25°C)	3 Days
@ 100°F (38°C)	36 Hours
<b>Thinner</b>	Plural – no thinner shall be used
	Airless – no more than 5% with Archco Thinner 400E (3 lbs. /1.4 kg per 5 gal. /19 liter kit)
<b>Ratio by volume (A to B)</b>	3:1 Ratio
<b>Performance Data</b>	
Crude Oil	Excellent
Water	Excellent
Solvents	Very Good
Acids (inorganic)	Very Good
Salt	Excellent
<b>Color</b>	Grey, Red Oxide & Buff
<b>VOC</b>	0.74 lbs/gal (0.03 kg/liter)

**STORAGE:** Minimum 18 months when stored in original containers @ 41°F (5°C) to 110°F (43°C).

**CLEANING:** Clean equipment with MEK or equivalent solvent cleaner.

**HEALTH AND SAFETY:** Wear protective clothing and ensure adequate ventilation. Avoid contact with skin and eyes. See material safety data sheet for further information.

**PACKAGING:** 4 gallon (15 liter) kits standard. Other kit sizes are available.



**HOUSTON:**  
9747 Whithorn Drive,  
Houston, Texas,  
U.S.A. 77095  
Tel: 1-281-821-3355  
Fax: 1-281-821-0304

**TORONTO:**  
90 Ironside Crescent,  
Unit 12, Toronto,  
Ontario, Canada M1X1M3  
Tel: 1-416-291-3435  
Fax: 1-416-291-0898

e-mail: [info@premiercoatings.com](mailto:info@premiercoatings.com)

[www.premiercoatings.com](http://www.premiercoatings.com)

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