PRODUCT DATA SHEET

Archco 480 Epoxy

Epoxy Lining for Ethanol Tanks

Description

Archco 480 Epoxy is a 100% solids, two-part, epoxy cycloaliphatic-amine system designed for fast-return-to-service, internal tank linings. The coating has excellent, low-temperature cure properties and resistance to ethanol.

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

- 100% Solids
- Excellent resistance to ethanol
- Very low permeability
- Excellent adhesion
- Excellent overcoat window
- Cures at temperatures down to 35°F (2°C)
- Fast dry and set times
- Cures under cool and damp climates
- Good flexibility and impact resistance
- Fast return to service

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.

To spray the Archco 480 Epoxy, a plural component airless spray unit with a proportioning pump capable of a volume mixing ratio of 4:1 shall be used. Standard ancillary equipment should include minimum 10 gallon (38 liters) hoppers, 2 each static mixers, 25 ft. max x ¼" (7.6 m max x 6.3 mm) whip hose, and mastic gun with a 23 to 31 thou tip. Part A should be heated to 100-120°F (38°C-49°C) and Part B should be heated to 90-110°F (32°C-43°C). Hose bundle shall be set at 100-120°F (38°C-49°C). A wet on wet spray technique should be used to achieve a minimum thickness of 20 mils (508 microns). The coating thickness should be measured using a wet film thickness gauge. The equipment settings are only guidelines and may vary based on equipment and specific application.

For complete application instructions, please refer to Archco 480 Epoxy application specifications.

Denso®

Archco 480 Epoxy

Technical Data

Properties	Value
Solids Content	100%
Base Component — unmixed @ 77°F (25°C)	
Specific Gravity	1.5
Viscosity	35,000 cP
Color	White
Hardener — unmixed @ 77°F (25°C)	
Specific Gravity	1.0
Viscosity	2000 cP
Color	Blue
Mixed Material — mixed @ 77°F (25°C)	
Specific Gravity	1.4
Viscosity	15,000 cP
Color	Blue
Mixing Ratio (A/B) by Volume	4 Parts Base: 1 Part Hardener
by Weight	6.2 Parts Base: 1 Part Hardener
Cure Times	
Pot Life @ 77°F (25°C)	15 minutes
Pot Life @ 97°F (36°C)	8 minutes
Time to Dry @ 35°F (2°C)	24-36 hours
Time to Dry @ 50°F (10°C)	12-14 hours
Time to Dry @ 77°F (25°C)	3-4 hours
Cure for Immersion (ethanol)	
@ 35°F (2°C)	36 hours
@ 75°F (24°C)	24 hours
Recoat Window	
@ 77°F (25°C)	30 days
Theoretical Coverage	80 ft^2/20 mils/gallon (2.0 m^2/0.50 mm)
Thickness per coat	20-60 mils (508-1524 microns)
Holiday Detection – based on min. mil.	100 volts/mil (3,936 V/mm)
Hardness (ASTM D2240-02)	Shore D 82 +/-2
Adhesion to Steel	3,200 psi (22 MPa)
Application Temperature	35-100°F (2-36°C)
Service Temperature	35-150°F (2-66°C)

STORAGE: Minimum 24 months when stored in original containers @ 40°F (4°C) to 105°F (41°C). On job site where temperatures are below 50°F (10°C) product should be kept warm to allow for easy transfer into storage hoppers for warming to proper spraying temperatures.

CLEANING: Clean equipment with MEK or equivalent solvent cleaner, such as Archco 400E Thinner.

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: 5 gallon (19 liters) & 20 gallon (76 liters) kits. Other sizes available upon request.

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