# TECHNICAL DATA SHEET

# ARCHCO 456™

## A Surface Tolerant Natural Gas Pipeline Flowliner

## Description

Archco 456 is a two-component, high-solids, surface-tolerant epoxy flowliner for "dry" natural gas transmission pipelines. It is designed to increase flow efficiency of natural gas in pipelines. This lining provides a smooth surface inside the pipe that will increase flow and reduce energy cost of transporting natural gas. Meets or exceeds API RP 5L2.

## Uses

- Dry natural gas transmission pipelines

## Features

- Improves flow efficiency in gas pipelines
- Excellent corrosion protection
- Excellent flow and leveling
- Single-coat application
- Hard, smooth, glossy finish
- Excellent abrasion resistance
- Low surface tension (27 Dynes) for higher gas flow
- Excellent adhesion
- Independently tested & meets or exceeds API RP 5L2

## Mixing

**Mixing:** Material is supplied in two containers as a unit. Always mix a complete unit in the proportions supplied. Once the unit has been mixed it must be used within the working pot life specified.

1. Before mixing, agitate base (Part A) with a power agitator.
2. Combine entire contents of catalyst (Part B) with base and mix thoroughly with power agitator.

**Thinning:** May be thinned up to 10% with Archco 400E, MIBK or MAK.

## Surface Prep

Surface preparation is very important and will improve the adhesion and extend the life of Archco 456. Surface preparation should include the following:

- Surface must be at least 40˚F (4˚C) prior to application.
- Surfaces must be dry, clean, free of oil, grease, and other contaminants and must

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be structurally sound.
- All direct-to-metal coatings provide maximum performance over blasted surfaces.
- For steel service the minimum standard is SSPC-SP6, NACE 3, Sa 2, surface profile of 1.2 -2.5 mils (30-63 microns)

## Application

Typical Film Thickness:

**Wet:** 4.7 to 7.8 mils (119 to 198 microns)

**Dry:** 3 to 5 mils (76 to 127 microns)

Airless Spray: Tip range 17-21 thou. Total output fluid pressure at spray tip not less than 3,000 psi. A 30:1 pump or larger is recommended. Ideally, fluid hoses should not be less than 3/8" ID and no longer than 50 feet to obtain optimum results.

## Storage

Store in a dry, well-ventilated area between 40°F to 105°F (4°C to 41°C) in original, unopened containers. Shelf life is at least 6 months under these conditions. It is recommended that all components be stored between 68°F to 86°F (20°C to 30°C) for 24 hours prior to use for optimum pumping and productivity.

## Cleaning

Clean equipment with Archco 400E, MIBK or MAK or equivalent solvent cleaner.

## HSE

Wear protective clothing and ensure adequate ventilation. Avoid contact with skin and eyes. See safety data sheet for further information.

## Packaging

5 gallon (19 liters) kits and 55 gallon (190 liters) kits.

| Kit Sizes | Part A | Part B |
|---|---|---|
| 5 gals (19 liters) kit | 1 ea. 2.5 gals (9.46 liters) pails | 1 ea. 2.5 gal (9.46 liters) pails |
| 55 gals (190 liters) kit | 19 ea. 2.75 gals (10.41 liters) pails | 1 ea. 2.75 gal (10.41 liters) pails |

Contact Premier Coatings for other kit size alternatives.

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## Tech Data

| Properties | Imperial | *Metric* |
|---|---|---|
| **Solids Content by Volume** | 64% ( ± 0.2%) | *64% ( ± 0.2%)* |
| **Mixed VOC** | 2.72 lbs/gal | *326 grams/liter* |
| **Operating Temperature** | | |
| Immersed | 200°F | *93°C* |
| Atmospheric | 275°F | *135°C* |
| **Mix Ratio by Volume** | 19 to 1 (A to B) | *19 to 1 (A to B)* |
| **Thickness** | | |
| Wet | 4.7 to 7.8 mils | *119 to 198 microns* |
| Dry | 3 to 5 mils | *76 to 127 microns* |
| **Number of Coats** | One | *One* |
| **Theoretical Coverage @ 3 to 5 mils** | 342 to 205 sq. ft/gal | *31.77 to 19.05 sq. m/gal* |
| **Thinner** | Archco 400E, MIBK, or MAK | |
| **Shelf- Life** | 6 months | *6 months* |
| **Flash Point** | 40°F | *4°C* |
| **Pot Life @77°F (25°C)** | 2 hours + | *2 hours +* |
| **Dry Time @ 77°F (25°C) / and 50% RH** | | |
| Set Time | 30 Minutes | *30 Minutes* |
| Tack Free | 2 Hours | *2 Hours* |
| Through Cure | 6 Hours | *6 Hours* |
| Full Cure | 7 Days | *7 Days* |
| **Gloss Level** | High | *High* |
| **Performance Data** | | |
| Oil Immersion (ASTM D-1308) | Passes 1000 hours | *Passes 1000 hours* |
| Salt Water Immersion (ASTM D-1308) | Passes 1000 hours | *Passes 1000 hours* |
| Pencil Hardness (ASTM D-3363) | H | *H* |
| Adhesion (ASTM D-4541) | 2800+ psi | *19.31+ MPa* |
| Salt Fog Resistance (ASTM B-117) | 2000+ Hours Passes | *2000+ Hours Passes* |


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