

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



TECHNICAL DATA SHEET

- 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 Denso for other kit size alternatives.

TECHNICAL DATA SHEET

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



DENSO NORTH AMERICA

HOUSTON:
9710 Telge Road,
Houston, Texas,
U.S.A. 77095
Tel: 281-821-3355
Fax: 281-821-0304

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

www.densona.com

info@densona.com

**A Member of Winn
& Coales International**

The information given on this sheet is intended as a general guide only and should not be used for specification purposes. We believe the information to be accurate and reliable but do not guarantee it. We assume no responsibility for the use of this information. Users must, by their own tests, determine the suitability of the products and information supplied by us for their own particular purposes. No patent liability can be assumed.