Aralox® - PIP

Two-component, 100% solids, high build viscosity epoxy resin.

PRODUCT DESCRIPTION

Aralox PIP is a two-component, 100% solids, high-build epoxy system designed for domestic pipe rehabilitation, including applications like CIPP (Cured-In-Place Pipe). Its high-build viscosity maximizes fiber saturation, making it ideal for residential sewer line rehabilitation, stormwater drainage repair, and household wastewater pipe refurbishment.

With its optimal consistency, Aralox PIP ensures thorough impregnation of polyester felt, mesh, and glass fiber liners, providing a reliable solution for trenchless home plumbing repairs and domestic drain pipe rehabilitation. This system offers strong adhesion and durability, along with excellent resistance to wear and environmental exposure, making it suitable for leaking or damaged household pipelines, underground water supply reinforcement, and small-scale utility pipe repairs. Its ease of handling and long-lasting performance make it a trusted choice for home and garden water system maintenance.

INTENDED USES

- Household pipe maintenance and repair
- Sewer and stormwater line repair
- Wastewater system refurbishment
- Small utility and drain pipe restoration
- CIPP applications

FEATURES

- Simple 2:1 mix ratio by volume
- Fast curing time of 1-2 hours
- High-build mixed viscosity for thorough liner impregnation
- Excellent adhesion to polyester, glass fiber, and mesh liners
- High chemical resistance to alkalis, acids, and oil derivatives
- Zero VOCs - safe for confined spaces with no harmful fumes
- Durable, long-lasting performance in harsh environments
- Suitable for trenchless pipe rehabilitation applications
- Resistant to moisture and water ingress

PRODUCT DATA

Volume Solids	100%
Theoretical Coverage	5 Square meters / litre at 200 Microns DFT
Finish	Clear Liquid
Colour	Available in clear and factory colours
Gloss	High
Mixing Ratio	2:1 by volume
Pot life	30 Min @ 25°C
Typical Thickness	2500 microns DFT (1000 to 3000 Microns WFT)
Cleaner	LM1 Thinner
Flash Point	>93°C Method: Closed Cup
VOC	0 Grams/Litre
Specific Gravity	1.11

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CURE & RECOAT

Substrate Temp	Tacked	Hard Dry	Full Cure Note 1	Minimum Recoat	Maximum Recoat Time Note 2
5°C	6 Hrs	10 Hrs		10 Hrs	4 Days
10°C	4 Hrs	6 Hrs		6 Hrs	3 Days
15°C	2 Hrs	4 Hrs		4 Hrs	2 Days
25°C	1 Hr	2 Hrs	7 - 14 Days	2 Hrs	1 Days
40°C	0.5 Hrs	1 Hr		1 Hr	0.5 Day

Note 1: Pull-off adhesion testing is best conducted after 3 Days plus at ambient cure

Note 2: Where the coating is exposed to direct sun and UV, the maximum recoat time will be considerably reduced. Contact Liquimix for advice.

ENGINEERING DATA

Property	Test Method	Result
Dry Heat Resistance	Intermittent	100°C
Hardness	Shore D	50
Elongation at 25°C	ASTM D412 06ae2	1 - 2%
Abrasion Resistance	ASTM c501-84, H18 wheel @ 1,000rpm with 1,000g weight	98
Tensile Strength	ASTM D412-92	16.0 MPa

POT LIFE

Mixed Product Temperature	Pot Life (Note 1)
10°C	90 min
15°C	60 min
25°C	30 min
40°C	10 min

Note 1: Pot Life is dependent on product temperature as well as mix size. When using larger mix sizes, the pot life will be shorter. Keep products cool

LIMITATIONS

- Gel time and curing rates are influenced by temperature, humidity, and resin thickness. Thicker applications will take longer to cure, while higher humidity and temperatures will accelerate curing.
- In extreme conditions, mix smaller batches to maintain control over working times. Test gel time and curing rates before starting large applications.
- Stop application 5 minutes before the resin starts to gel to avoid trapping air bubbles in the liner.

SURFACE PREP

Pipe Surface

Proper surface preparation is essential for optimal adhesion of the Aralox PIP system. Follow these steps based on the pipe's material:

1. Surface Condition: For pipes made from concrete, steel, PVC, cast iron, or fiberglass, ensure they are structurally sound, dry, and free of moisture before application. Use blowers or dehumidifiers if necessary.
2. Contaminant Removal: Clean the internal surface thoroughly, removing all oil, grease, scaling, rust, or other contaminants. Use high-pressure water jetting, chemical cleaning, or abrasive blasting, especially for steel and cast iron pipes, which are prone to corrosion.

3. Surface Profiling: Abrade metal and concrete pipes if needed to enhance adhesion of the resin.
4. Defect Filling: Fill any cracks, holes, or imperfections in concrete or metal pipes using Aralox PIP or appropriate fillers.
5. Once clean and dust-free follow 'Application Guidelines'.

APPLICATION

Mixing

Always stir Aralox-PIP Part A (Clear or Pigmented Resin) and Aralox-PIP Part B (milky yellow colour) thoroughly in their original container before use.

Mechanically mix (by volume) 2 Parts of Aralox-PIP Part A with 1 Part of Aralox-PIP Part B hardener (2:1). Do not vary from this ratio. Do not attempt to part mix and make up the entire mix. Mix until homogeneous.

To ensure correct mix ratio, reduce product wastage, and speed up the application rate, consider using specialised Graco plural component spray equipment. Request more information from Liquimix.

Equipment

Application:	Inversion method, Pull-in place method and Rotational curing are suitable
Temperature of material at gun:	Ambient (20 - 30°C)

Environment

Relative humidity:	The relative humidity must be less than 85%
Dew point:	The substrate temperature must be at least 5°C higher than the dew point temperature
Substrate Temperature:	Do not apply if the substrate temperature is less than 5°C above the dew point

Thinning

Thinning of Aralox-PIP is not considered necessary or desirable.

Cleanup

LM1 Thinner may be used for general clean-up of equipment and hoses. To remove cured material from metal parts, soak in Swell. Keep all gun part A side components in soak containers on the left side of the work bench and all part B side components on the right side of the work bench. The use of plastic soak containers with clip-on lids and removable baskets makes the job easier. Replace the SWELL regularly as soon as it starts turning cloudy and dirty

Pipe Wall

Surface Preparation: Ensure the internal surface of the pipe is clean and free of any debris, oils, or moisture. The pipe should be properly descaled and dried before application to maximize adhesion.

Liner Impregnation: Saturate the polyester felt, mesh, or glass fiber liner thoroughly with Aralox PIP epoxy resin. Ensure the resin fully penetrates the liner to achieve proper adhesion and strength.

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Application Method: Aralox PIP can be applied using a suitable roller, airless spray equipment, or mechanical inversion tools depending on the installation method. For larger pipes or longer lengths, use appropriate equipment such as Graco Spray Equipment or mechanical inversion systems for efficient application.

Avoid Excess Resin: During application, ensure that excess resin does not pool or pond inside the pipe. If this occurs, spread the excess using a roller or specialized tools to ensure an even distribution across the liner.

COMPATIBILITY

Sealer Coat	Aralox – FL170 Aralox – PIP
Outer Layer	Aralox - FL170 Aralox – PIP

TYPICAL SYSTEM

Substrate	Environment	Substrate Prep	Application	System	DFT
Pipe Wall	Immersion in Effluent	Rotary Grinding or Surface Profiling	Fully soak the liner in resin	Aralox – PIP	2.5 mm

STORAGE & HANDLING

Store in dry, shaded conditions away from sources of heat and ignition and in properly sealed containers. Protect from heat and frost.
A shelf life of 24 months minimum is typical if stored under ambient conditions at 25°C

PACK SIZE

25L Kits
20L of Aralox-PIP Part A in a 20L container
10L of Aralox-PIP Part B in a 10L container

5L Kits
2L of Aralox-PIP Part A in a 2L container
1L of Aralox-PIP Part B in a 1L container

HEALTH & SAFETY

Aralox-PIP is for professional use only.
This product should not be used without consulting the Safety Datasheet (SDS) as published on the Liquimix website first.
Observe all health and safety as well as environmental legislation.

DISCLAIMER

The information contained herein is offered without charge and is for use by technically qualified personnel at their own risk. All statements, technical information and recommendations contained herein are based on tests and data which we believe to be reliable, but the accuracy or completeness thereof is not guaranteed, and no warranty of any kind is made with respect thereto.

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