



RESINS

Perma-Liner Industries (PLI) offers 100% solids epoxy resins for standard lateral lining in ambient and heat-assist options. CIPP industry-standard resins, such as vinyl ester and polyester, are available for most projects. Specialty resins, including high-temperature, chemical-resistant, and styrene-free, are available for specialized projects in industrial or environmentally sensitive areas.

FEATURES & BENEFITS:

- Zero styrene's and no VOC's
- Minimal shrinkage for maximum adherence to the host pipe
- Meets and exceeds ASTM 1216 and NSF standards
- 3rd party tested
- Engineered compatibility with PLI products
- 12 different types of resin for all types of rehabilitation projects
- Eco-friendly
- Quality-controlled exothermic timing
- Ambient and heat-assist resins engineered for the curing equipment at PLI



PRODUCT FAMILY	TYPE	BUCKET SIZE (LBS)	CURE METHOD	INSTALLATION TEMPERATURE RANGE (°F)	OPERATIONAL TEMPERATURE (°F)	HEAT DEFLECTION TEMPERATURE (°F)	APPLICATION NOTES
Epoxy Resin	4:1 Extreme Cold	40	Ambient	50 and Lower	100	150	Sewer/Stormwater
	2:1 Extreme Cold	40	Ambient	30 and Lower	100	150	Sewer/Stormwater
	2:1 Cold	40	Ambient	30 to 50	100	150	Sewer/Stormwater
	2:1 Warm	40	Ambient	50 to 70	100	150	Sewer/Stormwater
	2:1 Hot	40	Ambient	70 and Above	100	150	Sewer/Stormwater
	2:1 Heat-Assist	40	Steam/Hot Water	No temperature restrictions	100	150	Sewer/Stormwater
Vinyl Ester Resin	Standard	40	Ambient/Steam	30 to 70+ (Depends on % of BPO)	162	212	California Greenbook Approved
	Hybrid	40	Steam	No temperature restrictions	252	302	
	Styrene-Free	40	Ambient/Steam	30 to 70+ (Depends on % of BPO)	162	212	Eco-friendly Sewer/Stormwater
	UV	40	UV	No temperature restrictions	120	170	Non-thermosetting resin
Polyester Resin	MLR	40	Ambient/Steam	30 to 70+ (Depends on % of BPO)	175	225	MLR product-specific
Silicate Resin	Water Glass Hardener	50	Ambient	No temperature restrictions	135	185	Chimney lining and patch repairs with fiberglass insert/backing