TECHNICAL DATA SHEET

MaxLight® EA Resin System

UV/LED Cure Resin for CIPP Rehabilitation

DESCRIPTION

The MaxLight EA Resin System is a light-curable epoxy acrylate formulation specifically engineered for Cured-in-Place pipe (CIPP) rehabilitation applications, and is designed to meet all specifications for full structural CIPP liner conforming to ASTM F1216. MaxLight EA exhibits excellent adhesion to structural materials and provides superior corrosion resistance to municipal sewage, acids, and alkalis commonly found in drain, sewer, and commercial wastewater environments. The resin cures across the UV and visible light spectrum, offering flexibility in curing lamp selection and intensity.

TECHNICAL DATA

MaxLight EA Resin System full cure will be achieved when exposed to proper UV/LED intensity. Ambient temperatures of 0 – 120°F | -17 – 48.8°C have minimal effect on cure characteristics. The resin achieves substantial cure in under 5 minutes with no high-temperature post-cure required to reach peak mechanical and thermal properties.

BENEFITS

- Compatible with multiple UV/LED cure systems
- Single-component formulation
- Superior adhesion to pipe materials
- Excellent chemical resistance
- Designed specifically for CIPP applications
- Environmental compliance (non-hazmat at ≤5L)

REACTION DATA

Single Component

- No Blending Required

Temperature

- 77°F | 25°C prior to curing

Cure

- Ultraviolet/LED light cure
- Multiple cure systems

PHYSICAL PROPERTIES — MAXLIGHT EA RESIN CURED IN ML ALPHAMAX LINER			
PROPERTY	UV/LED	PULL-IN-PLACE LED	TEST METHOD
Tensile Strength, psi	14,214	14,608	ASTM D638
Tensile Elongation, %	3.43	3.82	ASTM D638
Young's Modulus, psi	1,418,502	1,384,556	ASTM D638
Flexural Strength, psi	18,248	14,569	ASTM D790
Flexural Modulus, psi	1,155,721	1,072,663	ASTM D790

TYPICAL LIQUID PROPERTIES			
PROPERTY	VALUE	UNIT OF MEASURE	
Viscosity at 77°F	25°C	3,300	cps
Color	Clear Blue	Gardner	
Specific Gravity at 77°F	25°C	1.06	g/cm³
Cure Range	UV/LED	Multiple Systems	

Liquid properties subject to variation based on lamp type and operating conditions. Consult technical support for specific application parameters.

DEFLECTION TEMPERATURE TESTING DATA

Product

- MaxLight EA with ML Alphamax Liner

Test Method

- ASTM D648-18, Method B (Heat Deflection Temperature)

TEST RESULTS		
FIBER STRESS	DEFLECTION TEMP	TEMP (°F)
264 psi	77.2°C	171°F
66 psi	192°C	378°F

Key Performance Summary

- High heat deflection temperature demonstrates excellent thermal stability
- Superior performance under reduced load (66 psi | 4.5 bar): 378°F | 192°C
- Standard load (264 psi | 18 bar) performance: 171°F | 77.2°C
- For full test results, please email info@maxlinerusa.com.

SYSTEM
MaxLight EA Resin is engineered to fully impregnate (wet-out) specialized CIPP liners designed for light-curable resin systems. Follow MaxLiner or equivalent manufacturer recommendations for equipment, procedures, and liner specifications to ensure proper wet-out and installation.

FINAL PRODUCT
The combined MaxLight EA resin and liner system is cured by UV/LED after insertion into the host pipe to form a durable, strong renovated pipe that resists municipal sewage, acids, and alkalis commonly found in drains, sewers, and commercial wastewater applications.

MaxLight EA Resin System has been specifically formulated for CIPP applications and represents a purposeful development for the complex environmental, design, and performance requirements of the trenchless rehabilitation industry.

STORAGE
It is recommended that the resin be pre-mixed before use. Resins are stable for three months from date of production when stored in original containers away from direct sunlight at no more than 77°F | 25°C. During hot summer months, no more than two months stability at 86°F | 30°C should be anticipated. UVEA contains UV/visible light initiators and will polymerize upon exposure to sunlight or intense artificial light sources. Store in cool, dark conditions.

SAFETY
Always use appropriate Personal Protective Equipment (PPE) when handling this product. Do not ingest. Always read the container label warnings and Safety Data Sheets (SDS) prior to use.

Hazard Classification:
- Skin irritation (Category 2) - H315: Causes skin irritation
- Serious eye irritation (Category 2A) - H319: Causes serious eye irritation
- Skin sensitization (Category 1) - H317: May cause an allergic skin reaction
- Respiratory irritation (Category 3) - H335: May cause respiratory irritation
- Aquatic toxicity (Acute Category 2, Chronic Category 2) - H401/H411: Toxic to aquatic life

If you do not understand or cannot adhere to all guidelines and procedures for safe handling in strict accordance with the SDS, do not use this product.

DISPOSAL
Disposal must conform to local, state, and federal regulations. Do not allow spills to enter drains or waterways. In the United States, MaxLight EA is classified as an environmentally hazardous substance (UN3082) for transportation purposes when shipped in quantities exceeding 5 liters or 5 kilograms.

TECHNICAL SUPPORT
For additional technical questions, contact: Customer Service: 844-782-4832
24-Hour Emergency:
- Domestic & Canada: 1-800-633-8253
- International: 1-801-629-0667

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

The combined resin and liner system properties depend on the specific liner type, lamp system, and cure parameters employed. Always read, understand, and comply with hazard warnings described in the product's Safety Data Sheet(s) before use.

SDS can be downloaded from the MaxLiner Mobile App or website at maxlinerusa.com.