TECHNICAL DATA SHEET

MAXLINER®

# MaxLight®+Resin System

## UV LED Cure Resins for CIPP Rehabilitation

### DESCRIPTION

The MaxLight® PLUS Resin System is an ultra-clear non-hazmat acrylate modified Epoxy Resin that is light curable and exhibits excellent adhesion to most structural materials, while possessing superior corrosion resistance. MaxLight PLUS cures in the safer UVA range of 365 – 410nm, such as those found in natural sunlight and LED lights. This new ultra clear formula aids in depth of penetration and speed of cure in thick wall fiber reinforced laminates.

### TECHNICAL DATA

MaxLight PLUS Resin System full cure will take place in 1–4 minutes when exposed to proper UVA light intensity. Ambient temperatures of 0 – 120°F | -17 – 48.8°C have little effect on the cure time or physical properties of this light-cured resin. This system will reach 99%+ state of cure in under 5 minutes with no high temperature post cure required to reach peak mechanical and thermal properties. MaxLiner can alter the cure rate and viscosity based on customers' application.



MaxLight® PLUS Resin: Transparent

### BENEFITS

- 40% faster cure rate
- No Styrene, ultra-low odor
- Superior Chemical Properties
- More Chemical Resistance
- Higher Heat Deflection Temperature
- No shrinkage with proper curing (cool down step)

| REACTION DATA | |
|---|---|
| Single Component | No Blending |
| Temperature | 77°F \| 25°C prior to mixing |
| Cure | Ultraviolet light cure — 400nm |

| PHYSICAL PROPERTIES[1] | | | |
|---|---|---|---|
| TEST | TEST METHOD | ASTEMF1216 | MAXLIGHT PLUS RESIN |
| Flexural Modulus, psi | ASTM D790 | 250,000 | 636,000 |
| Flexural Strength, psi | ASTM D790 | 4,500 | 24,900 |
| Tensile Strength, psi | ASTM D638 | 3,000 | 15,000 |
| Tensile Elongation, % | ASTM D638 | < 5 | 4.3 |
| Heat Deflection Temp (HDT) | ASTM D648 | — | 220°F \| 105°C @ 264 psi |

[1] Based on tests at 77°F | 25°C and 50% relative humidity. All tests performed on unreinforced cured resin castings. Thixotropic components, if applicable, are excluded from casting samples.

| TYPICAL LIQUID PROPERTIES[2] | | |
|---|---|---|
| **TEST** | **UNIT OF MEASURE** | |
| Viscosity, at 77°F \| 25°C | cps | 2,800 |
| Color | Gardner | 6 |
| Specific Gravity at 77°F \| 25°C | pounds / gallon | 9.50 |
| UV Gel Time | minutes | 1 – 4 |

[2] The gel times shown are typical but may be affected by catalyst, promoter, inhibitor concentration, resin, mold, and shop temperature. Variations in gelling characteristics can be expected between different lots of catalysts and at extremely high humidities. Pigment and/or filler can retard or accelerate gelation. It is recommended that the fabricator check the gelling characteristics of a small quantity of resin under actual operating conditions prior to use.

Typical properties are not to be construed as specifications.

## SYSTEM

MaxLight PLUS Resin is calculated by weight to fully impregnate (wet-out) MaxLiner tubes specially designed for the MaxLight Resin Systems. Follow MaxLiner recommendations for equipment and procedures for proper liner wet-out and installation.

## FINAL PRODUCT

The combined resin and liner system is cured by UV LED light after insertion into the host pipe to form a tough, strong, renovated pipe that is resistant to municipal sewage, acids and alkalis commonly found in drains, sewers and commercial wastewater.

It is important to note that the MaxLight Resin Systems are specifically designed for CIPP applications and has not been modified from another industry resin in attempt to fit the complex environmental, design and performance needs required in the CIPP rehabilitation industry.

## STORAGE

It is recommended that the resin is pre-mixed before decanting from a tote, and also in the bucket before use. Resins are stable for three months from date of production when stored in the original containers away from sunlight at no more than 77°F | 25°C. During the hot summer months, no more than two months stability at 86°F | 30°C should be anticipated. Resin contains UV initiator and will polymerize upon exposure to sunlight.

## SAFETY

Always use Personal Protective Equipment (PPE) when using this product. Do not ingest. Always read the container label warning and Safety Data Sheets (SDS) prior to use. If you do not understand or cannot adhere to the guidelines and procedures for handling and use of these products in strict accordance with the SDS, do not use these products.

## DISPOSAL

Disposal must conform to local and state regulations.

## TECHNICAL SUPPORT

Call technical support with additional questions at (877) 426-5948.

## 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, but the accuracy or completeness thereof is not guaranteed, and no warranty of any kind is made with respect thereto. Exact coating type and thickness depend on the specific types of resin being used. Always read, understand, and comply with hazard warnings described in the products' Safety Data Sheet(s) before use.

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