

# EnviroCure UV<sup>®</sup>

## FEATURES AND BENEFITS

- Multi-layer, overlapping glass fiber liner cure creates high strength, thinner wall
- Pre-impregnated, installation ready up to 1,200 ft. (365 m)
- Minimum 6-month shelf life in climate controlled environment
- Once Cured, smooth inner surface improves flow capacity, minimizes abrasion
- Easily bridge and accommodate offset joints and diameter changes
- **Flexible liner properties create “dimple” effect at service connections for easy location**
- Liner design has inherent 10% expansion
- EnviroCure UV is cured using ultra-violet light resulting in a faster cure and lower overall CO<sub>2</sub> emissions

## UV INSTALLATION EQUIPMENT

Ask about the Vortex line of UV curing equipment for a broad range of diameters.

## TYPICAL APPLICATIONS

### EnviroCure UV Removable Inner Film

- **Round: 6 in. - 24 in. (150mm - 610mm)**
- **Oval: 8-1/2 in. - 12 in. (200mm - 300mm) | 14 in. - 20 in. (350mm - 525mm)**

## EnviroCure UV<sup>®</sup> For Gravity Sewers

### DESCRIPTION

Designed for gravity sewers, the family of EnviroCure UV CIPP liners are the perfect solution for extreme weather and environmentally sensitive projects. A key advantage of a UV Cured liner is its high-strength than can be achieved with a thinner wall. EnviroCure UV’s multi-layered, overlapping construction make this possible.

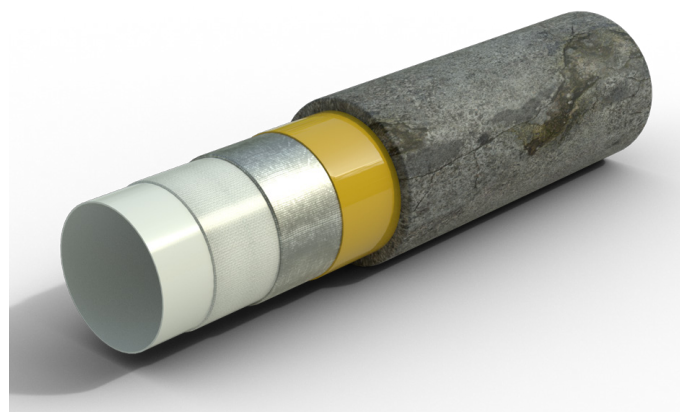
EnviroCure UV is delivered to the jobsite pre-impregnated with resin and ready for installation. This feature, combined with a faster and more efficient UV curing process, leads to improved QA/QC, lower job costs, smaller equipment footprint and reduced CO<sub>2</sub> emissions during installation.

### Anatomy of EnviroCure UV CIPP Liners

#### ENVIROCURE UV

Features 4 layers of material, which are overlapped to provide maximum strength. This multi-layer construction consists of:

1. Inner Film, Removable
2. Fiberglass/Felt
3. Fiberglass
4. Outer Film - UV Protective Layer



## TYPICAL MATERIAL PERFORMANCE & PHYSICAL PROPERTIES

EnviroCure UV <sup>®</sup>			
APPLICATION TYPES			
GRAVITY PIPE & CULVERTS			
Round: 6 in. - 24 in. (150mm-610mm)			
Oval: 8.5 in. - 12 in. (200 mm - 300mm)   14 in. - 20 in. (350mm - 525mm)			
REINFORCEMENT MATERIAL			
Stitched, multi-axel ECR glass			
RESIN: HIGH MOLECULAR WEIGHT UV CURABLE POLYESTER			
Test	Unit of Measure	Nominal	Test Methods
Tensile Strength	psi/MPa	11,100/77	ASTM D638
Tensile Modulus	psi/GPa	490,000/3.4	ASTM D638
Tensile Elongation	%	3.3	ASTM D638
Flexural Strength	psi/MPa	18,240/126	ASTM D790
Flexural Modulus	psi/GPa	500,000/3.4	ASTM D790
Heat Distortion Temp.	°F/°C @264 psi	248/120	ASTM D648
Barcol Hardness	—	48	ASTM D2583
GLASS FIBRE CONTENT ACCORDING TO ISO 1172 (MASS RELATED)			
50% (±5%)			
GLASS WEIGHT PER UNIT AREA (EACH MM STRUCTURAL WALL THICKNESS/LAMINATE)			
1112 g/m <sup>2</sup> (+/- 10%)			
SHORT TERM MODULUS OF ELASTICITY (E-MODULUS) ACCORDING TO ASTM D790			
<i>*Indicative of composite thickness not including corrosion barrier.</i>			
≥ 2,707,040 psi			
SHORT TERM FLEXURAL E-MODULUS ACCORDING TO ASTM D790			
<i>*Indicative of composite thickness not including corrosion barrier.</i>			
≥ 2,707,040 psi			
SHORT TERM FLEXURAL STRENGTH ACCORDING TO ASTM D790			
<i>*Indicative of composite thickness not including corrosion barrier.</i>			
≥ 75,801 psi			

\*Liner designs should adhere to industry standards and include a safety factor and/or assume 90% of typical physical properties.