Quad-Cure® UVVE

TECHNICAL DATA

TYPICAL PERFORMANCE CHARACTERISTICS*

LIQUID COMPONENTS

CHARACTERISTICS	TEST METHOD	PERFORMANCE
Viscosity @ 77°F | 25°C	ASTM D445[1]	4,000 mPa•s
Appearance	—	milky white
Specific Gravity @ 77°F | 25°C	ASTM D1475-85	1.11 Lbs/gal.

[1] *Brookfield, RVTD, Spindle 4*

HARDENED RESIN / MECHANICAL PERFORMANCE

CHARACTERISTICS	TEST METHOD	PERFORMANCE
Flexural Modulus	ASTM D790	406.6 ksi | 2,800 MPa
Flexural Strength	ASTM D790	14,649 psi | 101 MPa
Compressive Strength	ASTM D695	25,817 psi | 178 MPa
Tensile Strength	ASTM D638	8,700 psi | 60 MPa
Tensile Elongation	ASTM D638	5%
Heat Deflection Temp (HDT) 174°F | 79°C	ASTM D648	264 psi | 1.8 MPa

**The values stated in inch-pound units are to be regarded as the standard. The values given in international system are for information only.*

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

TYPICAL HANDLING PROPERTIES

CHARACTERISTICS	TEST METHOD	PERFORMANCE
UV Gel Time @ 77°F | 25°C	Techne GT-4 Geletion Timer	1-2 minutes
Heat Cure Gel Time @ 176°F | 80°C	Techne GT-4 Geletion Timer	3 minutes

Typical properties are not to be construed as specifications.

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.

QUADEX® A VORTEX COMPANY | REPAIR MATERIALS

Quad-Cure® UVVE Resin Systems — UV Cure Resins for CIPP Rehabilitation

DESCRIPTION

The Quad-Cure UVVE Vinyl Ester Resin Systems are uniquely formulated to cure with UV light that offer superior mechanical properties and chemical resistance. As a part of the Quad-Cure liner system, these resins are specially designed with excellent wet-out capability, ultra-low odor and are Styrene-free.

Quad-Cure UVVE Resin Systems are single-component resins designed to meet all specifications for a fully structural Cured-In-Place Pipe (CIPP) liner conforming to all applicable ASTM standards. Impregnated liner potlife varies with temperature and liner tube coating type. The data provided below is for reference only.

STORAGE

Resins are stable for up to one year from date of production when properly stored in the original containers, away from sunlight at no more than 77°F | 25°C. During hot summer months, take extra caution to not exceed 86° F | 30°C. Resin contains UV initiator and will polymerize upon exposure to sunlight. Always check lighting prior to use.

SAFETY

Always use Personal Protective Equipment (PPE) when using this product. Do not ingest. Always read the container warning label 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. It is important to note that Quad-Cure UVVE Resin Systems are specifically designed for CIPP applications and have not been modified from another industry resin in attempt to fit the complex environmental, design and performance needs required in the CIPP rehabilitation industry.

BENEFITS

- **No mixing - single component**
- **No Styrene, ultra-low odor**
- **No waste**
- **Superior mechanical properties**
- **Rapid cure times**
- **Excellent UV cure profile**

REACTION DATA

- **Single Component: No Mixing**
- **Temperature: 77°F | 25°C prior to mixing**
- **Cure: Ultraviolet light wavelength - 400nm ± 20nm**

SYSTEM

Quad-Cure® UVVE Resins are calculated by weight to fully impregnate (wet-out) Quad-Cure tubes specially designed for the Quadex Lining System. Follow Quad-Cure recommendations for equipment and procedures for proper liner wet-out and installation.

FINAL PRODUCT

The combined resin and liner system is cured by UV 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.