

# ELECTRO-LITE UV ADHESIVES

## Technical Data Sheet ELC-4481 Optically Clear Acrylic

### Description:

ELC 4481 is a UV curing structural adhesive designed for joining fiber optics as well as the assembly of glass to glass, and glass to metal applications. ELC-4481 is designed for use in the optical and fiber optics industries for the bonding of fiber bundles, fiber optic splicing, transparent potting, and lens assembly. ELC-4481 optically clear UV adhesive while maintaining the same specification are available in three viscosities; low @ 300 cps, medium @ 5000 cps and high @ 10,000 cps.

### Features:

-  **Excellent Adhesion**
-  **Good Water & Chemical Resistance**
-  **Good Surface Cure**
-  **Medium Viscosity**

### Physical Properties

#### Typical Uncured Properties:

Chemical type:	Acrylic
Appearance	Straw to amber
Density	1.2 @ 77°F gm/cc
Viscosity @ 77°F	4,000
Brookfield RVTD, Spindle #6 @ 20rpm	
Flash point TCC	197°F

#### Typical Cured Properties: (bulk properties ASTM D882)

Elongation @ break	90%
Tensile strength @ break	2,000 psi
Hardness Shore D	70
Water absorption, ASTM D570	7.6 % (2 hrs in boiling water)
Refractive index $n_D$	1.5017
Operating temperature	-65 F -300 F
Dielectric strength ASTM D257	475 V/mil
Dielectric constant ASTM D150	5.697 @ 100Hz

**Cure Schedule:**

Cure speed is dependent upon the UV light source, thickness of material, distance from the light, and UV transmission of substrates through which the UV light must pass to reach the adhesive. Optimum curing @ 365 nm.

**Storage:**

Store out of sunlight and in original container. Maintain at 45 to 65 degrees F for a maximum shelf life. Avoid exposing material to moisture or Nitrogen environments

**Packaging:**

Low 300 cps		Medium 5,000 CPS		High 10,000 CPS	
p/n 82698	10 ml syringe	p/n 82002	10 ml syringe	p/n 82143	10 ml syringe
p/n 82651	30 ml syringe	p/n 82468	30 ml syringe	p/n 82773	30 ml syringe
p/n 82062	1000 ml bottle	p/n 82026	1000 ml bottle	p/n 82774	1000 ml bottle

12 oz and 32 oz SEMCO cartridges are also available. For pricing and p/n please contact Electro-Lite Sales @ 203-743-6733, extension 304 or 305.

**Important:**

The information in this brochure is based on data obtained by our own research and is considered accurate. However, no warranty is expressed or implied regarding the accuracy of these data, the results to be obtained from the use thereof, or that any such use will not infringe any patent. This information is furnished upon the condition that the person receiving it shall make his own tests to determine the suitability thereof for his particular purpose.



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