

Features & Benefits

- Ultra-low viscosity for capillary wicking into tight seams
- Designed for trimless letter and trim cap bonding
- Fast UV cure for rapid fixturing and improved throughput
- Optically clear, shadow-free bond line
- Excellent adhesion to plastics Capillary action
- Compatible with secondary seam adhesives (UV or MMA)
- 100% solids, no solvents
- Excellent adhesion to acrylic, polycarbonate, PVC, aluminum, and metals

Description

TrimLok™ UV3206 LV is a low viscosity, UV-curable adhesive engineered for letter assembly, including both trimless letter construction and trim cap bonding. The material is designed to wick into extremely tight bond lines that behave like near butt joints, such as the interface between aluminum extrusions and acrylic faces. UV3206 LV is used as a primary wicking and fixturing adhesive, allowing rapid positioning and handling strength before applying a secondary seam adhesive where required. In trim cap applications, the adhesive wicks between the acrylic face and trim cap flange, creating a clean, secure bond without excess squeeze-out or visible adhesive lines.

Physical Properties of Uncured Adhesive

Chemical composition	Methacrylate ester
Appearance	Clear, colourless
Viscosity @ 25°C	50-100 mPa s (CP)
Specific gravity	1.10

Typical Curing Properties

Fixture time (low power 3-5 mW/cm ² lamp)	Polycarbonate: 25-30 s Rigid PVC: 5-7 s PMMA: 4-5 s
Cure wavelength	365 - 420 nm**

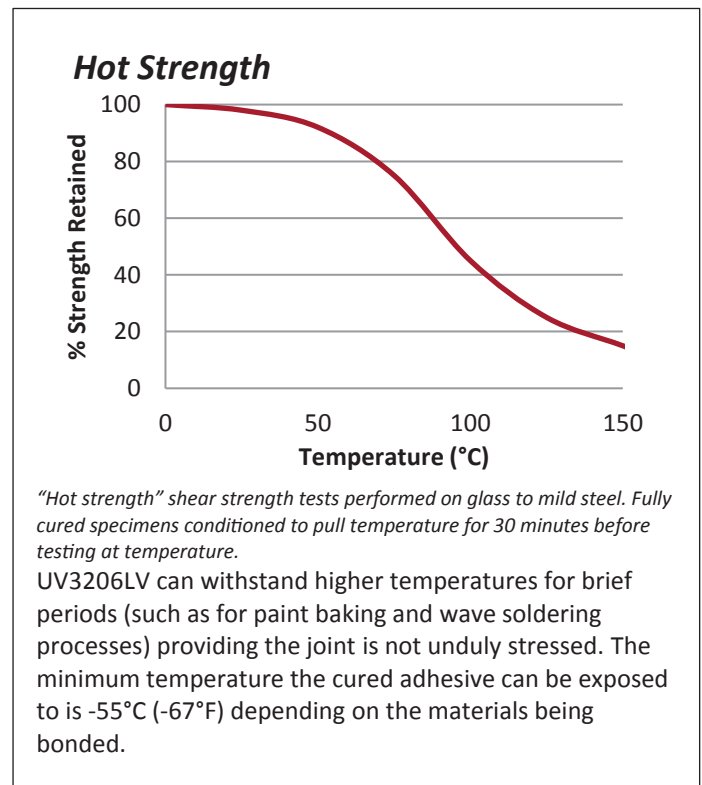
*The cure time depends on the power of the UV lamp, its spectral output, the distance between the lamp and the components, and the transmission characteristics of the substrates. The cure time quoted here was determined using a low power, hand held lamp. Most industrial UV lamps would give faster cure rate.

**LED UV lamps have a narrow range of spectral output. It is important to check suitability with Chemical Concepts in order to match the LED lamp's peak wavelength with that of the adhesive's photoinitiator to ensure optimal adhesive cure.

Typical Properties of Cured Adhesive

Shear strength (ISO 4587)	Polycarbonate: >7N/mm ² (>1000 psi)* Rigid PVC: >2N/mm ² (>300 psi)* PMMA: 1.5-2N/mm ² (200-300psi)
Tensile strength (DIN 53504)	15 - 20 N/mm ² (2200 psi)
Elongation (DIN 53504)	100 - 150%
Hardness (ISO868)	50-65 Shore D
Refractive index	1.474

*Substrate failure was observed



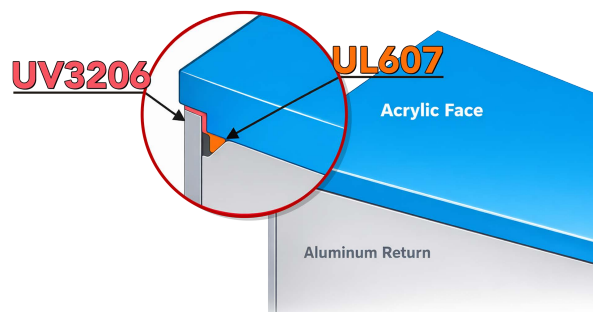
Typical Applications

- Trimless letters
- Aluminum extrusions to acrylic face bonding
- Trim cap to acrylic face bonding
- Backlit and front-lit letters
- Architectural and retail signage
- Tight tolerance plastic assemblies requiring capillary action

Letter assembly often involves minimal bond area and tight interfaces. UV3206 LV penetrates micro gaps through capillary action, creating initial adhesion across the joint. A secondary adhesive can then be applied to build long-term strength, flexibility, and environmental resistance.

Recommended Process – Trimless Letters

1. Dry fit aluminum extrusions and acrylic face
2. Apply UV3206 LV and allow adhesive to wick into seam
3. UV light cure to fixture components
4. Apply secondary seam adhesive:
5. UV thick grade (all-UV system), or
6. Structural MMA (UL607)
7. Final cure and inspection

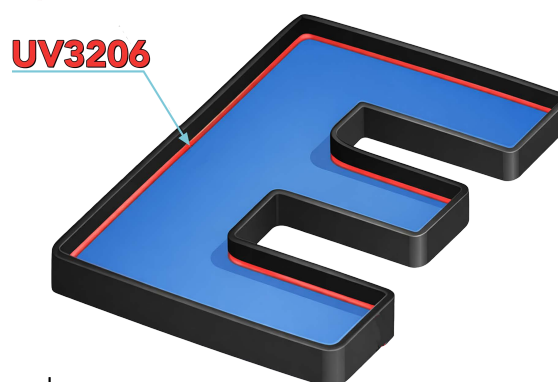


UV3206 LV wicks into the interface between aluminum extrusions and acrylic faces to fixture the assembly. A secondary adhesive such as UL607 builds long-term strength and flexibility.

Recommended Process - Trim Cap Bonding

1. Ensure acrylic edge is clean and free of contaminants
2. Position trim cap onto acrylic face
3. Apply UV3206 LV along the trim edge and allow adhesive to wick into the interface
4. UV light cure to fixture trim cap
5. Inspect for full wet-out along bond line

Optional: Secondary adhesive may be used if additional strength is required.



UV3206 LV wicks between the acrylic face and trim cap to create a clean, secure bond with no visible squeeze-out

Surface Preparation

1. Adhesive can either be applied directly from the bottle or dispensed via automated dispensing equipment for more accurate dosing. Minimize exposure of product to ambient light.
2. It is important to try to prevent air entrapment within the joint as this could be detrimental to the finished appearance of the adhesive.
3. Parts should be firmly held and not disturbed during cure. Expose the joint to ultra-violet light for the appropriate time to ensure full cure. Cure time depends on the power of the UV lamp, its spectral output, the distance between the lamp and the components, and the transmission characteristics of the substrates.
4. For help selecting a suitable lamp and/or dispensing equipment, please contact the Chemical Concepts.

Note: For trim cap applications, ensure no silicone-based cleaners or release agents are present on the acrylic edge, as these can reduce bond strength.

Storage & Handling

Storage Temperature	5 to 25°C (41 to 77°F)
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Protect liquid adhesive from room lighting.

This Technical Datasheet (TDS) offers guideline information and does not constitute a specification.

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