

# UV OPTICAL ADHESIVES

## Norland Optical Adhesives .....

These one part adhesives will set in seconds when exposed to ultraviolet light and can provide excellent light transmission over a wide spectral range. Our Optical Adhesives are designed for bonding where low-strain, optical clarity or low outgassing is required in military, aerospace, fiber optics or commercial optics.

- **Excellent Optical Qualities**
- **UV Light Fast Cure**
- **Easy to Use**
- **1 Oz. Bottles**



1 ounce APPLICATOR BOTTLES							
Product	Glass	Adhesion to Metal	Plastic	Color	Viscosity (cps)	Refractive Index	Recommended for
NOA 60	Good	Good	Fair	Clear	300	1.56	General purpose adhesive for bonding doublets, prisms or mounting components
NOA 61	Excellent	Excellent	Fair	Clear	300	1.56	Preferred adhesive for military optics. Meets MIL-A-3920. Used for optics exposed to temperature extremes. Low shrinkage
NOA 63	Good	Good	Fair	Clear	2500	1.56	Cures well in thick sections. Use as a fillet bond to hold lenses in place or for bonding where low fluorescence or good transmission in UV range is required
NOA 65	Good	Good	Fair	Clear	1000	1.52	Flexible adhesive, suitable for low strain applications or for cold blocking of lenses
NOA 68	Excellent	Good	Good/Exc	Clear	5000	1.54	Flexible adhesive for glass or plastics such as polycarbonate CAB or acrylic
NOA 68T	Good	Good	Good/Exc	Clear	20,000 to 25,000	1.54	High viscosity, flexible optical adhesive for glass or plastics such as polycarbonate CAB or acrylic.
NOA 81	Excellent	Excellent	Fair	Clear	300	1.56	Extra fast curing adhesive for tacking, and spot bonding. Produces a hard, resilient bond.

⇒ Set of 6 Adhesives (NOA 60-81) available.



**VIN KAROLA INSTRUMENTS**

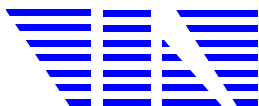
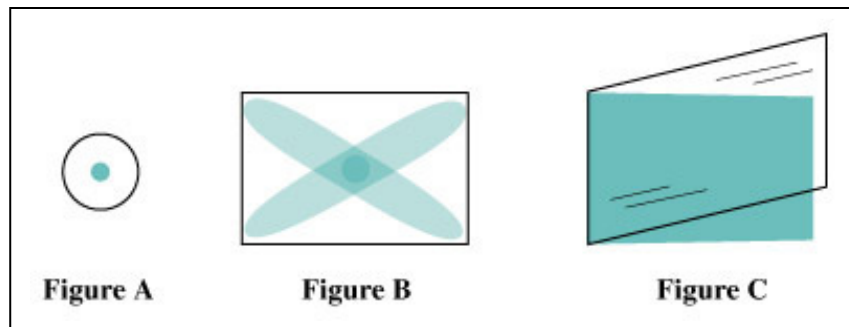
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## Applying Adhesive

For small precision bonding the adhesive is applied dropwise to the center of one surface. The second surface is lowered at a slight angle onto the adhesive-laden surface and light pressure is used to work the adhesive out to the edges (See Figure A).

For square and rectangular laminates, the adhesive is applied in an "X" pattern from corner to corner. Additional drops are added to the center of the X. The two sheets are laminated starting at one end to push the adhesive and air out in front of it. When the second surface is brought into contact the adhesive in the center spreads out in a circular fashion and the corners also have adhesive without trapping air bubbles. (See Figure B).

For large laminates a thin layer of adhesive should be applied to the whole surface using a draw bar or rollercoater. The two sheets are laminated starting at one end to push the adhesive and air out in front of it. (See Figure C).



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