

DATA SHEET

OAC-134: Low Refractive Index Optical Adhesive / Coating

OAC-134 is a low refractive index optical adhesive, developed for bonding and coating of glasses and plastics. Typical applications include bonding of lenses and waveguides in AR glasses, recoating of fiber-optic components, etc.

OAC-134 includes a proprietary adhesion promoter that improves adhesion, especially under wet conditions (e.g. 85C/85%RH test).

Properties

	Liquid state
RI liquid at 589 nm	1.341
Density, g/cm³	1.66
Viscosity, cps @ 25°C	2500
	Cured state
RI cured at 589 nm	1.346
RI cured at 950 nm	1.341
Adhesion to glass, 90° Peel, g/cm	28
Elastic modulus, MPa	17
Tensile Strength, MPa	8
Elongation at Break, %	36

The product is supplied pre-filtered to below 1 micron particles.

Storage

- 1. Avoid unnecessary exposure to ambient light and moisture.
- 2. Long term storage should be at ambient conditions of 10-30°C.
- 3. The coating is supplied in glass bottles. Keep container closed to avoid moisture penetration.
- 4. The shelf life is 6 months.

Application

Typically, a dose of 1000-2000 mJ/cm2 is necessary. Any UV source in the range 300-400 nm can be used.

When used as an external coating, an inert atmosphere (or some other means of insulating the surface of the adhesive from the air) is required to prevent a tacky surface. When used between surfaces (e.g. in AR glasses) there is no need for an inert atmosphere.

Keep the bottle closed at all times when not in use. The material is sensitive to both light and moisture.

Safety: Refer to the SDS

Note: The above information is believed to be reliable, but it is not to be taken as a representation, warrantee or guarantee. Customers should perform their own QC, QA and evaluation tests.

Updated: May 21, 2025