

EPO-TEK® UV Cure Selector Guide

EPO-TEK®	VISCOSITY @ 23°C (cPs)	GLASS TRANSITION TEMPERATURE (Tg)	SHORE HARDNESS	OUTGASSING @ 200°C	TGA DEGRADATION TEMPERATURE	INDEX OF REFRACTION (Nd)	SPECTRAL TRANSMISSION
UV0114	@ 100 rpm 450	≥45°C	76D	1.23%	361°C	1.5191	>94% 500 – 1400nm >97% @ 1550nm
OG113	@ 100 rpm 120	≥42°C	83D	1.29%	322°C	1.5071	>93% 440 – 1600nm
OG116	@ 2.5 rpm 85,000	≥130°C	85D	0.29%	411°C	1.5744	>96% 440 – 1600nm
OG116-31	@10 rpm 25,000	≥115°C	83D	0.23%	407°C	1.5656	>91% 440 – 900nm >96% 900 – 1600nm
OG125	@ 100 rpm 100	≥50°C	79D	6.90%	226°C	1.4355	>99% 440 – 1600nm
OG127-4	@ 0.5rpm 800,000	≥89°C	45D	1.94%	360°C	1.6020	>97% 600 – 900nm
OG133-8	@ 10 rpm 3,482	≥-5°C	65A	2.37%	352°C	1.5030	>90% 640 – 900nm
OG134	@ 100 rpm 75	≥15°C	76D	5.07%	247°C	1.4194	>99% 440 – 1600nm
OG142	@ 20 rpm 12,000	≥95°C	86D	0.20%	421°C	1.5692	>97% 660 – 1640nm
OG142-6	@ 10 rpm 25,395	≥98°C	85D	0.40%	394°C	1.5672	>79% 600 – 900nm
OG147	@ 10 rpm 35,000	≥130°C	80D	0.47%	365°C	n/a	<6% 360 – 680nm <9% 700 – 980nm
OG147-7	@ 10 rpm 35,000	≥70°C	81D	0.09%	414°C	1.5690	>78% 580 – 800nm >83% 800 – 2000nm
OG159-2	@ 2.5 rpm 120,000	≥58°C	69D	0.13%	443°C	1.5679	>98% 580 – 2000nm
OG175	@ 100 rpm 1,800	≥15°C	76D	0.45%	410°C	1.4466	>97% 600 – 1700nm
OG603	@ 100 rpm 200	≥70°C	84D	0.79%	385°C	1.4736	>98% 420 – 1600nm

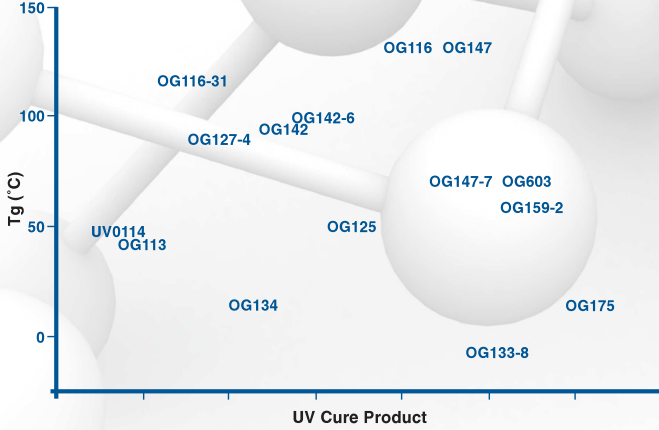
Above is representative of Epoxy Technology's custom line of Photo Curable adhesives. Advantages include Command Cure, Low Shrinkage, Various Rheologies, Index Matching, Low Moisture Resistance, High Reliability. See data sheet for cure conditions.

DISCLAIMER: Data presented is provided only as a guide in selecting an adhesive. Properties listed are typical, average values, based on tests believed to be accurate. It is recommended the user perform a thorough evaluation for any application based on their specific requirements. Epoxy Technology makes no warranties (expressed or implied) and assumes no responsibility in connection with the use or inability to use these products.

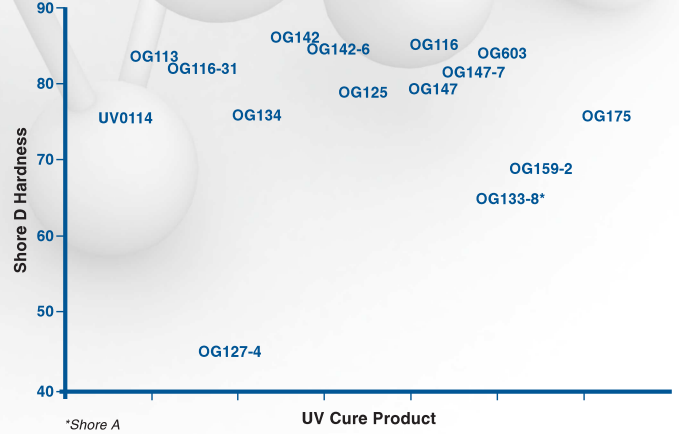
PRODUCT	PERFORMANCE FEATURE
UV0114	A clear, colorless, general purpose, single component, UV adhesive. Capable of transmitting light in the 400-1600nm range. Compatible with near IR optics and packaging schemes. Can be used as an anti-scratch coating on lenses. No significant shrinkage during cure. Also used for optical replication.
OG113	A clear, colorless, single component, low viscosity, UV adhesive. Used for general adhesive bonding, potting, coating, and encapsulation.
OG116	A clear, colorless, single component, high viscosity, UV adhesive. Used for general adhesive bonding.
OG116-31	A cloudy-white, single component, high viscosity, UV adhesive. Complies with USP Class VI biocompatibility. Commonly used in COB glob-top. Good adhesion to FR4, Kapton, silicon, glass and most plastics.
OG125	A clear, colorless, single component, low viscosity, low index of refraction, UV adhesive. Optically transparent.
OG127-4	A clear to slightly yellow, very high viscosity, high index of refraction, single component, UV adhesive.
OG133-8	A cloudy-colorless, very low Tg, slightly thixotropic paste, single component, UV adhesive. Good flexibility for glob-top encapsulation and other stress relief applications.
OG134	A clear, very low viscosity, high stress absorbing, single component, UV adhesive. Low index of refraction. Excellent for fiber optic wicking or coating, soft and flexible after cure. Popular for micro-molding lenses for LCD projection.
OG142	A clear, colorless, single component, UV adhesive. Optically clear. Designed for sealing and encapsulating in semiconductor, electro-optics, fiber optics, medical and OEM applications. High Tg strength and moisture resistance is ideal for LCD and OLED projects.
OG142-6	An off white-color, thixotropic/smooth paste, single component, UV adhesive. Ideal for COB glob-top "dam" encapsulation processes.
OG147	A black-color, high Tg, high viscosity, single component, UV adhesive. Designed for adhesion, sealing, and encapsulating opto-electronics, fiber optics, circuit assembly, and medical projects. Ideal for blocking out light in opto-electronic packages. A very smooth thixotropic black paste.
OG147-7	A white, thixotropic, high viscosity, single component, UV adhesive ideal for COB glob-top "dam" encapsulation processes.
OG159-2	A white-color, very high viscosity, single component, UV adhesive with glass beads. Designed for sealing glass plates in the LCD/OLED display industry. Can be applied by screen printing or dispensing. It contains 1mil glass beads for bond line control.
OG175	An optically clear, single component, UV adhesive. Low index of refraction for fiber optic and opto-electronic device packaging. Used in optical beam pathways. Very soft, flexible after cure. An adhesive for coupling fiber array to lens array using V-grooves.
OG603	A clear, colorless, low viscosity, single component, UV adhesive. General purpose adhesive for fiber optics, DVD, medical, and PCB level opto-electronics. Meets the requirements of USP class VI biocompatibility standards for medical implants.

Epoxy Technology's UV cure adhesives are also easy to modify for special applications. They can be modified to meet certain property parameters such as refractive index (optical clarity), shrinkage, glass transition temperature (Tg), high temperature strength, or hardness and surface adhesion. Always consult an Epoxy Technology applications expert for any modifications of the epoxy.

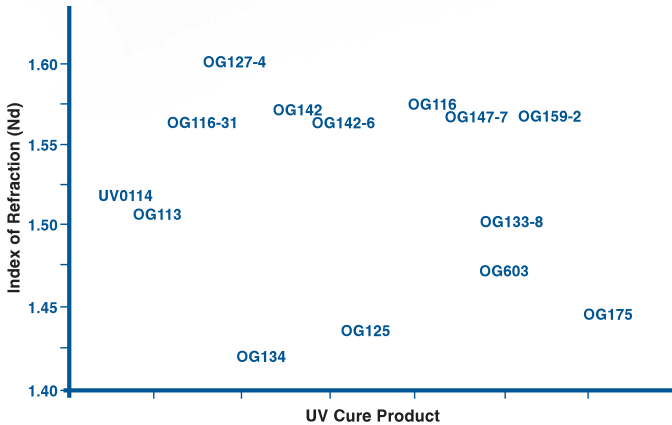
Epoxy Technology, Inc. manufactures a complete range of UV cure epoxy adhesives. Products vary by Glass Transition Temperature (Tg) for epoxies that are flexible, to tough and durable.



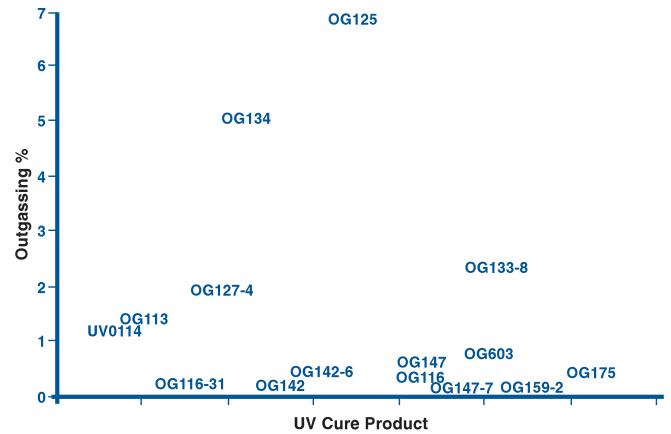
Hardness or durability can be critical in microelectronic circuitry. We provide a choice of epoxies for bond strength and insulating properties.



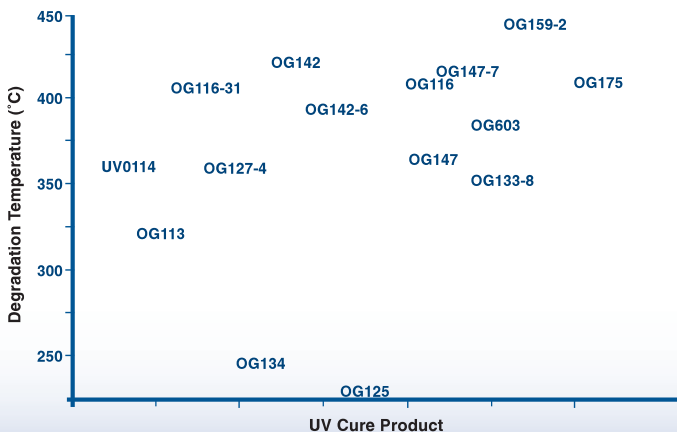
Refractive Index (Nd) is a measure of how much the speed of light is reduced inside an epoxy medium. Certain applications require different refractive indices. Different optical applications require a choice in the epoxies ability to manage light.



Every design consideration can be costly. In sensitive applications (eg. space and military), our low outgassing epoxies provide an excellent solution. Fiber bonding to fiber optic ferrules require low outgassing for fast positioning or alignment of the fibers.



Epoxy Technology engineers products according to an application's maximum continuous operating temperature. We recommend products based on the temperature to which the adhesive can be exposed for a long period of time without degradation.



Please consult our Applications Experts at Epoxy Technology to find the most suitable adhesives for specific technical challenges.



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