

EPO-TEK® offers an exclusive line of high performance UV curing adhesives based on both epoxy as well as acrylate systems. Our unique UV formulations provide superior performance with short cure times for a wide variety of applications. Many of our novel epoxy/UV formulations can be further enhanced by thermal post curing.

Current Product Listing for EPO-TEK® UV Adhesives

Epoxy-Based

Thermal Post Cure - Increases the degree of conversion; enhancing performance

UV + Thermal Post Cure (typically 80-150°C) for Enhanced Performance

EPO-TEK®	CURE CONDITIONS (minimal)	VISCOSITY @ 23°C (cPs)	GLASS TRANSITION TEMPERATURE (T _g)	HARDNESS	INDEX OF REFRACTION Nd*	SPECTRAL TRANSMISSION	UV TRANSMISSION % AT 400nm	PERFORMANCE FEATURES
0G116	100mW/cm ² @ 240 – 365nm for > 30 sec	@ 2.5 rpm 80,000 - 10,500	≥135°C	n/a	1.5892	89% @ 400nm ≥98% @ 560 – 1660nm	89.310%	Higher viscosity version of 0G116-31, high chemical resistance, Tg & index, very high strength
0G116-31	100mW/cm ² @ 240 – 365nm for > 30 sec	@ 10 rpm 20,000 – 30,000	≥115°C	83D	1.5842	≥92% @ 500nm ≥96% @ 660 – 1640nm	83.211%	High chemical resistance, high Tg & high index
0G142-87	100mW/cm ² @ 240 – 365nm for > 30 sec	@ 100 rpm 250 – 600	≥100°C	82D	1.5058	>97% @ 580 – 1660nm	83.110%	Low viscosity, excellent bond strength, moisture resistance
0G142-95	100mW/cm ² @ 240 – 365nm for > 2 min	@ 100 rpm 534	N/A	82D	1.5123	≥97% @ 580 – 1680nm	83.110%	Low viscosity, excellent bond strength, moisture resistance
0G142-112	100mW/cm ² @ 240 – 365nm for > 30 sec	@ 100 rpm 1,200 – 1,700	≥90°C	83D	1.5560	>97% @ 500 – 1660nm	80.334%	Medium viscosity, high moisture resistance, exceptional bond strength
0G159-2	100mW/cm ² @ 240 – 365nm for > 30 sec	@ 2.5 rpm 100,000 – 140,000	≥30°C	69D	1.5715	≥98% @ 580 – 2000nm	90.847%	Thixotropic, contains 1 mil glass beads, excellent moisture resistance
UJ1190	100mW/cm ² @ 240 – 365nm for > 60 sec	@ 100 rpm 501	100°C	80D	1.4993	≥80% @ 380 – 2440nm ≥94% @ 520 – 1560nm	86.567%	Low viscosity, good for thick sections
UD1355	100mW/cm ² @ 240 – 365nm for > 90 sec	@ 100 rpm 447	36°C	77D	1.4925	≥96% @ 800 – 2200nm ≥99% @ 360 – 780nm	99.921%	Optically clear, low viscosity, resists discoloration during solder reflow

UV + Thermal Post Cure (Typically 80-150°C) for Shadow Curing <5mm shadow cure with proper thermal cure

EPO-TEK®	CURE CONDITIONS (minimal)	VISCOSITY @ 23°C (cPs)	GLASS TRANSITION TEMPERATURE (T _g)	HARDNESS	INDEX OF REFRACTION Nd*	SPECTRAL TRANSMISSION	PERFORMANCE FEATURES
† 0G198-54	100mW/cm ² @ 240 – 365nm for > 30 sec	@ 100 rpm 200 – 450	131°C	86D	1.5256	≥97% @ 460 – 1680nm	Low viscosity, high Tg, excellent bond strength
† 0G198-55	100mW/cm ² @ 240 – 365nm for > 30 sec	@ 100 rpm 1,200 – 2,000	>120°C	85D	1.5196	≥97% @ 560 – 1680nm	Thixotropic, high viscosity, high Tg

* Cured index measured at 589nm † 150°C/1 hour to cure shadowed areas optional

UV Cure Only

EPO-TEK®	CURE CONDITIONS (minimal)	VISCOSITY @ 23°C (cPs)	GLASS TRANSITION TEMPERATURE (T _g)	HARDNESS	INDEX OF REFRACTION Nd*	SPECTRAL TRANSMISSION	PERFORMANCE FEATURES
0G133-7	100mW/cm ² @ 320 – 500nm for > 2 min	@ 100 rpm 150 – 450	≤10°C	81A	1.5060	≥90% @ 440 – 580nm ≥96% @ 800 – 1600nm	Low viscosity, flexible, high flow version of 0G133-8
0G133-8	100mW/cm ² @ 240 – 365nm for > 90 sec	@ 100 rpm 1,000 – 1,500	≤10°C	65A	1.5244	≥90% @ 580 – 800nm ≥95% @ 820 – 1660nm	Thixotropic, low T _g & hardness, excellent flexibility
0G142	100mW/cm ² @ 240 – 365nm for > 30 sec	@ 20 rpm 9,000 – 15,000	≥95°C	86D	1.5809	≥92% @ 440 – 620nm ≥97% @ 660 – 1640nm	Medium viscosity, high strength, moisture resistance
0G154-1	100mW/cm ² @ 240 – 365nm for > 30 sec	@ 5 rpm 26,000 – 34,000	128°C	80D	1.5692	97% @ 500 – 1660nm	High viscosity, high T _g , low modulus

* Cured index measured at 589nm

Full Line of products at: epotek.com

UV Adhesive Expert advice at: techserv@epotek.com

Acrylate-Based

UV Cure Only

EPO-TEK®	CURE CONDITIONS (minimal)	VISCOSITY @ 23°C (cPs)	GLASS TRANSITION TEMPERATURE (T _g)	HARDNESS	INDEX OF REFRACTION Nd*	SPECTRAL TRANSMISSION	PERFORMANCE FEATURES
0G603	100mW/cm ² @ 240 – 365nm for > 5 sec	@ 100 rpm 150 – 250	≥70°C	84D	1.5037	≥98% @ 420 – 1600nm	Low viscosity, fast cure
0G653	100mW/cm ² @ 240 – 365nm for > 1 sec	@ 100 rpm 650 – 850	65°C	76D	1.5106	≥83% @ 380nm ≥97% @ 440 – 2220nm	Low viscosity, green colored, light blocking properties, very fast cure (1-3 sec @ 365nm)
0G675	100mW/cm ² @ 240 – 365nm for > 2 sec	@ 100 rpm 2,000 – 5,000	≥5°C	70A	1.4790	≥98% @ 400 – 1660nm	Medium viscosity, fast cure, low T _g

* Cured index measured at 589nm



Preferred Packaging for EPO-TEK® UV products is a single component syringe.

EPO-TEK® syringes offer many advantages:

- Increased reliability and consistency
- Ease of use - no mixing, less waste, lower environmental impact
- Increased productivity - cost effective

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UV ADHESIVES