

Loctite® brand adhesives are specified by the world's leading fiber optic component manufacturers. With the most diversified line of adhesives and sealants in the industry, Henkel offers Loctite® brand products to meet your specific needs. Whether you are manufacturing modulators, collimators, amplifiers, beam splitters, switches, etc., Henkel is the best resource for fiber optics assistance. Loctite® brand adhesives provide design advantages, speed assembly time, and increase production efficiency and quality.

BONDING

FIBER OPTIC ADHESIVES

Loctite® 3400™ OptiLOC® Fiber Optic Epoxy Adhesive

A low viscosity, fast curing epoxy. Once mixed, this two-part epoxy cures at room temperature or with heat to form a dark blue rigid potting and sealing material.

Loctite® 3401™ OptiLOC® Fiber Optic Epoxy Adhesive

A low viscosity, impact absorbing epoxy with enhanced dielectric properties. Designed for bonding optical connectors, fibers, lenses, and other optical components.

Loctite® 3402™ OptiLOC® Fiber Optic Epoxy Adhesive

A low viscosity, general purpose impact absorbing epoxy adhesive with an extended pot life and high glass transition temperature. Develops strong bonds to aluminum, ceramic, glass, and select plastics.

Loctite® 3403™ OptiLOC® Fiber Optic Epoxy Adhesive

A medium viscosity, impact absorbing epoxy adhesive with a moderate pot life. Once mixed, this two-part epoxy cures at room temperature or with heat to form an amber, rigid potting and sealing material.

Loctite® 3404™ OptiLOC® Fiber Optic Anaerobic Adhesive

A high strength, high viscosity single component anaerobic adhesive. This product cures upon contact with Loctite® OptiLOC® primer.

Loctite® 3405™ OptiLOC® Fiber Optic Anaerobic Adhesive

A high strength, single component anaerobic adhesive. Designed for bonding optical connectors, fibers, lenses, prisms, and other optical components. This product cures upon contact with Loctite® OptiLOC® primer.


Loctite® OptiLOC® Primer

Single component, non-CFC, solvent based surface primer. This primer is designed to ensure proper cure for Loctite® OptiLOC® anaerobic adhesives.

LOCTITE® BRAND LIGHT CURE
ACRYLIC ADHESIVES
PROPERTIES CHART

PRODUCT	Item Number	Container	Cure Type	Color	Viscosity ¹ cP	% Transmission ² NIR / Visible	Modulus ³ psi	Elongation ³ %	Hardness ⁴ (Shore D)	Tg ⁵	CTE ⁶ ppm/°C	Refractive Index ⁷	Linear Shrinkage ⁸ %
3345™	33417	25 ml syringe	UV/visible	Clear/straw	5,000	>95 / >90	37,000	250	53	53	95	1.5	1.9
3491™	28366	25 ml syringe	UV	Clear/straw	1,100	>90 / >90	288,000	27	75	63	100	1.51	1.98
3492™	28367	25 ml syringe	UV	Clear/straw	500	>90 / >90	200,000	5	79	64	90	1.51	1.93
3526™	30756	25 ml syringe	UV/visible/heat	Clear/straw	17,800	>90 / >90	42,000	185	62	64	110	1.51	2.14

LOCTITE® BRAND EPOXY ADHESIVES
PROPERTIES CHART

PRODUCT	Item Number	Container	Cure Type	Color	Viscosity ¹ cP	% Transmission ² NIR / Visible	Modulus ³ psi	Hardness ⁴ (Shore D)	Tg ⁵	CTE ⁶ ppm/°C	Refractive Index ⁷	Linear Shrinkage ⁸ %
0151™ Hysol®	83176	EPK 3.3 oz kit	Rt 2 pt	Clear	70,000/60,000	>95 / >90	300,000	85	84*	70	1.56	1.6
3337™	36057	25 ml syringe	Flexible cationic	Clear	5,000	>85	6,000	55	35	62	1.55	1.3
3340™ 	36906	25 ml syringe	Rigid cationic	Slightly hazy	5,000	>85	310,000	90	114	58	1.54	1.6
3400™ OptiLOC®	32545	2.5 gram twin-pak	Rt 2 pt	Blue	3,500/2,400	>90 / NA	290,000	85	122*	54	NA	1.7
3401™ OptiLOC®	32546	2.5 gram twin-pak	Rt 2 pt	Blue	8,300/80	>90 / NA	275,000	84	89*	63	NA	1.7
3402™ OptiLOC®	32547	2.5 gram twin-pak	Heat 2 pt	Red/amber	2,000/400	>95 / NA	340,000	90	120*	56	NA	1.5
3403™ OptiLOC®	32550	2.5 gram twin-pak	Rt 2 pt	Amber	79,000/29,000	>90 / >85	290,000	90	80*	73	NA	1.7

* Optimal Cure Conditions.

LOCTITE® BRAND ANAEROBIC
ADHESIVES PROPERTIES CHART

PRODUCT	Item Number	Container	Cure Type	Color	Viscosity ¹ cP	Shear Strength Steel/Steel, psi	Temperature Range
661™	66141	250 ml bottle	UV/primer/heat	Amber	500	3,500	65°F to 300°F
3404™ OptiLOC®	31809	5 ml bottle	Primer/heat	Green	1,250	4,000	65°F to 300°F
3405™ OptiLOC®	31810	5 ml bottle	Primer/heat	Green fluorescent	500	3,900	65°F to 300°F
OptiLOC® Primer	32226	1 oz. bottle	-	Green	-	-	-


LOCTITE® BRAND SILICONE
ADHESIVES PROPERTIES CHART

PRODUCT	Item Number	Container	Cure Type	Color	Viscosity ¹ cP	% Transmission ² NIR / Visible	Hardness ⁴ (Shore A)	Tg ⁵	CTE ⁶ ppm/°C	Agency Approvals
3407™ OptiLOC®	35173	30 ml syringe	Heat	Black	125 g/min*	NA	28	-48	275	-
5140™	18120	85 gm tube	RTV	Clear	35,000	>90 >90	30	-52	292	MIL-A-46146B
5145™	20250	3 oz. tube	RTV	Clear	200 g/min*	>85 >90	33	-49	228	MIL-A-46146B

* Extrusion Rate.

KEY

- 1 - Brookfield, 25°C
- 2 - ASTM E 1790 NIR (1000-2000 nm)
Loctite ARM 1122 VIS (420-1000 nm)
- 3 - ASTM D 882
- 4 - ASTM D 2240
- 5 - ASTM E 1545
- 6 - ASTM E 831, pre Tg
- 7 - ASTM D 542
- 8 - ASTM D 792
- 9 - ASTM E 831, post Tg

 Indicates worldwide availability.

See the Equipment Section for a full line of
Loctite® brand Dispensing and Curing systems.

