

MASTER BOND TWO COMPONENT SERIES APPLICATION SELECTOR GUIDE

Selected Two Component Epoxy Adhesives, Sealants, Coatings, Encapsulants & Potting Compounds
Partial Listing Only — Other Grades Available

Master Bond Grade	Mix Ratio by weight	Color Code	Mixed Viscosity RT, cps	Set-Up Time Minutes, RT	Cure Schedule Temp/Time, °F	Service Temp Range, °F	Applications
EP21	100/100	"A" gray "B" tan	50,000-60,000	60-90	24-48 hrs @ RT 2 hrs @ 200°F	-60 to +250°F	High performance general purpose adhesive, sealant and coating. Can alter mix ratio to vary toughness and flexibility.
EP21AO	100/100	"A" gray "B" white	light paste	45-60	24-48 hrs @ RT 2-3 hrs @ 200°F	-60 to +250°F	Thermally conductive version of EP21. Used primarily for bonding and sealing.
EP21AOLV	100/100	"A" gray "B" white	40,000-50,000	75-90	24-48 hrs @ RT 2-3 hrs @ 200°F	-60 to +250°F	Lower viscosity version of EP21AO. Easy to use, thermally conductive potting material/encapsulant.
EP21AN	100/100	"A" gray "B" white	light paste	60-90	24-48 hrs @ RT 2-3 hrs @ 200°F	-60 to +250°F	Higher thermally conductive version of EP21AO, Thermal conductivity at 75°F >22 BTU•in/ft ² •hr•°F.
EP21AR	100/50	"A" clear "B" amber	10,000-15,000	30-35	24-48 hrs @ RT 2-2½ hrs @ 200°F	-60 to +275°F	Superb resistance to inorganic and many organic acids. For bonding, sealing and coating.
EP21BAS	100/100	"A" off white "B" off white	>175,000	60-90	48-60 hrs @ RT 2-3 hrs @ 200°F	-60 to +250°F	Radio opaque adhesive/sealant/coating for medical and medical electronic applications.
EP21FL	100/25	"A" amber "B" amber	3,000-4,000	120-180	24-48 hrs @ RT 2-3 hrs @ 200°F	-60 to +250°F	Flexible version of EP21. Superior thermal cyclability, shock and impact resistance. Excellent adhesive/sealant.
EP21FRLVSP	100/100	"A" red "B" white	25,000-30,000	30-60	24-48 hrs @ RT 2 hrs @ 200°F	-60 to +250°F	Flame retardant. UL94 V-0 certified system. For potting and bonding.
EP21HT	100/100	"A" clear "B" amber	50,000-60,000	50-70	24-48 hrs @ RT 2 hrs @ 200°F	-60 to +400°F	High temperature resistant version of EP21 with excellent chemical resistant properties. Convenient handling.
EP21LSCL	100/60	"A" clear "B" clear	1,000-1,500	30-35	24 hrs @ RT 1-2 hr @ 200°F	-65 to +250°F	Transparent, non-yellowing version of EP21 for bonding, sealing and coating. For optical and display applications.
EP21LV	100/100	"A" clear "B" amber	6,000-8,000	60-90	24-48 hrs @ RT 1-2 hrs @ 200°F	-60 to +250°F	Lower viscosity than EP21. Food grade & USP Class VI certified. For bonding, sealing, coating & encapsulation.
EP21ND	100/100	"A" gray "B" tan	paste	45-60	24-48 hrs @ RT 2 hrs @ 200°F	-60 to +250°F	Non drip version of EP21. Suitable for vertical applications. Excellent adhesive/sealant.
EP21ROK	100/100	"A" gray "B" light tan	moderate paste	90-120	24-48 hrs @ RT	-60 to +250°F	Durable, tough, "no-skid" flooring with high chemical resistance.
EP21TCHT-1	100/66	"A" off white "B" off white	light paste	30-35	18-24 hrs @ RT 1-2 hrs @ 200°F	4°K to +400°F	NASA approved low outgassing; thermally conductive, for bonding and sealing. Cryogenically serviceable.
EP21TDC	100/100	"A" clear "B" amber	40,000-50,000	60-75	24-48 hrs @ RT 2 hrs @ 200°F	-100 to +250°F	Excellent general purpose adhesive/sealant. Convenient handling. Good impact & shock resistance.
EP21TDC-2	33/100	"A" clear "B" amber	70,000-80,000	75-90	72 hrs @ RT 2-3 hrs @ 200°F	4°K to +250°F	Highly flexible with exceptional thermal and mechanical shock resistance. Suitable for cryogenic applications.
EP21TDC-2AO	33/100	"A" white "B" off white	paste	90-120	48-72 hrs @ RT 3 hrs @ 200°F	-100 to +250°F	Thermally conductive version of EP21TDC-2. Particularly well suited for bonding dissimilar substrates.
EP21TDC-7	100/700	"A" clear "B" amber	120,000-140,000	120-150	48-96 hrs @ RT 3-4 hrs @ 200°F	-100 to +250°F	Ultra high flexibility. Exceptional for bonding most rubber materials (natural, SBR, nitrile, etc.).
EP21TDCHT	100/100	"A" clear "B" amber	100,000-120,000	60-90	48 hrs @ RT 2-3 hrs @ 200°F	-100 to +350°F	High temperature resistant general purpose system. Excellent adhesion to a wide variety of substrates.
EP21TDCS	100/100	"A" silver "B" silver	smooth paste	30-40	24-36 hrs @ RT 1-2 hrs @ 200°F	4°K to +250°F	High performance, silver filled, toughened system with excellent bond strength and cryogenic applicability.

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EP21TPND	100/100	"A" black "B" tan	thixotropic paste	30-45	48-60 hrs @ RT 1-2 hrs @ 200°F	-60 to +250°F	Polysulfide modified version of EP21. Fuel and oil resistant sealant.
EP21TP-2	100/100	"A" clear "B" amber	1,500-2,000	30-45	48-60 hrs @ RT 1-2 hrs @ 200°F	-60 to +250°F	Low viscosity version of EP21TPND. Ideal for potting and encapsulating.
EP22	100/100	"A" gray "B" gray	paste	60-90	10 hrs @ RT 2 hrs @ 200°F	-60 to +250°F	Aluminum filled epoxy featuring exceptional dimensional stability and machinability.
EP24	100/100	"A" gray "B" tan	50,000-60,000	10-20	12 hrs @ RT 30-45 min @ 200°F	-60 to +250°F	Faster curing version of EP21. Capable of curing at below 40°F. Ideal for field applications.
EP27	100/50	"A" clear "B" amber	2,100-2,500	25-30	12-24 hrs @ RT 1-2 hrs @ 200°F	-60 to +250°F	Superb coating/liner. Will cure below 40°F. Outstanding chemical resistance.
EP29LP	100/50	"A" clear "B" clear	800	> 6 hrs	5-7 days @ RT 4-6 hrs @ 200°F	-60 to +250°F	Transparent. Low viscosity, low exotherm, long working life system for bonding, casting and filament winding.
EP29LPSP	100/65	"A" clear "B" translucent	700	> 6 hrs	5-7 days @ RT 8-12 hrs @ 150°F	4°K to +250°F	Cryogenic version of EP29LP. Can withstand cryogenic shock. NASA low outgassing approved. Transparent.
EP30	100/25	"A" clear "B" clear	400-500	25-30	18-24 hrs @ RT 1-2 hrs @ 200°F	-60 to +250°F	Low viscosity transparent adhesive, sealant, coating and potting epoxy. Exceptionally low shrinkage.
EP30MED	100/25	"A" clear "B" clear	1,600-1,800	30-40	24-48 hrs @ RT 2-3 hrs @ 200°F	-60 to +250°F	Medical version of EP30. USP Class VI certified. Also meets food grade specifications. Transparent.
EP30-1	100/25	"A" clear "B" clear	1,500-1,600	30-35	24-48 hrs @ RT 2 hrs @ 200°F	-60 to +250°F	Lower viscosity transparent system for fiber optic bonding, coating, potting and encapsulation.
EP30-2	100/10	"A" clear "B" clear	1,800-2,000	20-25	24 hrs @ RT 1-2 hrs @ 200°F	-60 to +250°F	Clear system for optical and fiber optic bonding & sealing. Superb chemical resistance. Transparent.
EP30-3	100/33	"A" clear "B" clear	5,000-6,000	12-18 hrs	30-45 min @ 160°F plus 2-3 hrs @ 300°F	-60 to +435°F	Transparent, high temperature, high chemical resistant version of EP30. Requires heat cure.
EP30-4	100/50	"A" clear "B" clear	2,000	4-10	8-12 hrs @ RT	-60 to +250°F	Very fast curing transparent epoxy system. Superior non-yellowing properties.
EP30AO	100/10	"A" off white "B" clear	15,000-20,000	30-40	24-36 hrs @ RT 1-2 hr @ 200°F	-60 to +250°F	Low viscosity, thermally conductive system. Ideal for potting and encapsulation. Good dimensional stability.
EP30AN	100/10	"A" gray "B" clear	20,000-30,000	30-40	24-36 hrs @ RT 1-2 hrs @ 200°F	-60 to +250°F	Higher thermally conductive version of EP30AO. Special NASA low outgassing version also available (EP30AN-1).
EP30D-7	100/15	"A" black "B" yellow	40,000-50,000	45-50	36-48 hrs @ RT 2-2½ hrs @ 200°F	-60 to +250°F	Highly flexible, abrasion resistant adhesive, sealant, coating and encapsulant.
EP30D-10	100/5	"A" clear "B" clear	>120,000	3-4 hrs	3-4 days @ RT 3-4 hrs @ 200°F	-60 to +250°F	High viscosity. Very flexible with high elongation. Transparent. For bonding and sealing.
EP30DP	100/10	"A" light amber "B" clear	3,000-4,000	60-90	48 hrs @ RT 2-3 hrs @ 200°F	4°K to +250°F	Toughened sealant, potting and encapsulating material. Allows for repairability. Cryogenically serviceable.
EP30FL	100/25	"A" amber "B" clear	2,000-3,000	25-30	24 hrs @ RT 1-2 hrs @ 200°F	4°K to +250°F	Low viscosity, flexible, for high performance potting, encapsulating and sealing. Cryogenically serviceable.
EP30HT	100/25	"A" clear "B" clear	35,000-45,000	25-35	24 hrs @ RT 1-2 hrs @ 200°F	-60 to +400°F	High temperature resistant version of EP30, transparent, system for bonding, sealing, coating and casting.
EP30LTE	100/10	"A" black "B" clear	15,000-20,000	30-40	24-48 hrs @ RT 2-3 hrs @ 200°F	-60 to +250°F	Exceptionally low coefficient of expansion system with very low shrinkage & high dimensional stability.
EP30M3LV	100/50	"A" black "B" brown	2,000-3,000	130-150	48-72 hrs @ RT 3-4 hrs @ 200°F	-60 to +250°F	For potting, casting and encapsulation. Low exotherm. Long working life. Excellent for capacitors.
EP30R	100/25	"A" yellow "B" yellow	paste	30-35	24 hrs @ RT 2-3 hrs @ 200°F	-60 to +250°F	Fiber reinforced, high performance structural epoxy for bonding. Rigid with high impact resistance.

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EP31	100/33	"A" clear "B" clear	2,000-3,000	30-40	24-36 hrs @ RT 2 hrs @ 200°F	-60 to +250°F	Ultra high strength adhesive in both tensile and peel modes. Lap shear over 4,500 psi.
EP33	100/70	"A" gray "B" amber	50,000-60,000	50-60	24-48 hrs @ RT 1-2 hrs @ 200°F	-60 to +450°F	High temperature resistant adhesive/sealant. Can resist high radiation levels. Good physical strength properties.
EP34	100/70	"A" black "B" amber	70,000-80,000	50-60	24-48 hrs @ RT 1-2 hrs @ 200°F	-60 to +450°F	Mineral filled version of EP33. Superior electrical insulation properties.
EP34CA	100/50	"A" black "B" brown	5,000-6,000	12-24 hrs	1 hr @ 150°F plus 2-3 hrs @ 300°F	-60 to +500°F	Ultra high temperature resistant lower viscosity system for filament winding, potting & bonding. Requires heat cure.
EP35	100/70	"A" gray "B" amber	70,000-80,000	50-60	24-48 hrs @ RT 1-2 hrs @ 200°F	-60 to +450°F	Specially filled version of EP33. Enhanced dimensional stability.
EP37-3	100/50	"A" clear "B" clear	300-400	>6 hrs	5-7 days @ RT 4-6 hrs @ 200°F	-80 to +250°F	Low viscosity, low exotherm, transparent, slightly flexible. Exceptionally long working life. For bonding and potting.
EP37-3FLF	100/100	"A" clear "B" clear	1,500-1,800	120-150	48-72 hrs @ RT 3 hrs @ 200°F	4°K to +250°F	Highly flexible version of EP37-3. Transparent. For bonding, sealing & potting. Cryogenically serviceable.
EP37-3FLFAO	100/100	"A" white "B" white	18,000-22,000	3 hrs	4-5 days @ RT 4-6 hrs @ 200°F	4°K to +250°F	Thermally conductive version of EP37-3FLF. For potting & encapsulation. Repairable. Cryogenically serviceable.
EP39-2	100/50	"A" clear "B" clear	2,000-3,000	30-35	4-6 hrs @ RT	-60 to +300°F	Low viscosity. Fast curing. Used often as an optical adhesive/sealant and for chemically resistant coatings.
EP39M	100/75	"A" black "B" clear	3,000-4,000	35-40	24 hrs @ RT 1 hr @ 200°F	-60 to +350°F	Heat resistant adhesive/coating and encapsulant for capacitors and other electronic components.
EP41S-1	100/30	"A" clear "B" amber	6,000-7,000	25-30	24-36 hrs @ RT 1-2 hrs @ 200°F	-60 to +300°F	Special high performance epoxy with outstanding resistance to organic solvents, alcohols and fuels.
EP41S-4	100/25	"A" black "B" clear	3,000-4,000	15-20	24 hrs @ RT 1-2 hrs @ 200°F	-60 to +300°F	Chemically resistant to chlorinated solvents and acids. For coatings & high security potting applications.
EP42HT	100/40	"A" clear "B" amber	8,000-10,000	35-45	24-36 hrs @ RT 2-3 hrs @ 200°F	-60 to +435°F	USP Class VI. Resists repeated chemical, ETO, radiation and steam sterilization. For bonding, potting & sealing.
EP42LV	100/40	"A" clear "B" amber	2,000-2,300	25-35	24-36 hrs @ RT 2-3 hrs @ 200°F	-60 to +300°F	Low viscosity, highly chemical resistant coating, casting and bonding system.
EP45HT	100/30	"A" clear "B" brown	40,000-50,000	12-24 hrs	1 hr @ 150°F plus 2-3 hrs @ 300°F	-80 to +500°F	High temperature and chemically resistant structural adhesive/sealant. MMM-A-132 type III. Requires heat cure.
EP50	100/100	"A" clear "B" clear yellow	8,000-10,000	45 sec	5-15 min @ RT	-60 to +250°F	Super high-speed curing adhesive for structural bonding.
EP50-1.5	100/100	"A" clear "B" clear yellow	8,000-10,000	90-120 sec	2-3 hrs @ RT	4°K to +250°F	Very fast setting, cryogenic adhesive/sealant. Also available in thermally conductive version (EP50-1.5AO).
EP51	100/100	"A" clear "B" tan	10,000-12,000	5 min	4-6 hrs @ RT	4°K to +250°F	Fast curing, general purpose "5 minute" epoxy. Excellent long term durability. Cryogenically serviceable.
EP51HT	100/100	"A" clear "B" tan	60,000-70,000	5 min	4-6 hrs @ RT	-60 to +350°F	Higher heat resistant (350°F) version of EP51 epoxy resin system.
EP51M	100/100	"A" amber "B" tan	8,000-9,000	3 min	3-3½ hrs @ RT	4°K to +250°F	"3 minute" gel version of EP51 epoxy resin system. Cryogenically serviceable.
EP62-1	100/5 or 100/10	"A" clear "B" tan	8,000-10,000	8-10 hrs	4-6 hrs @ 150°F or 2-3 hrs @ 200°F	-60 to +300°F	High temperature, high chemical resistant adhesive/sealant. Long working life. Requires cure at 150-200°F.
EP65HT-1	100/10	"A" clear "B" dark purple	60,000-70,000	3-5	20-30 min @ RT	-60 to +400°F	Ultra-fast curing adhesive. Resists high temperatures, high bond strength, NASA low outgassing approved.
EP72M3	100/100	"A" black "B" white	100,000- 120,000	90-120	48-72 hrs @ RT 2-3 hrs @ 200°F	-60 to +275°F	Flexibilized system with exceptionally high impact resistance. High lap shear & peel strength.

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EP75-1	100/15	"A" dk gray/black "B" clear	paste	60	24-48 hrs @ RT 1-2 hrs @ 200°F	-60 to +250 °F	Electrically conductive (graphite filled) epoxy adhesive/sealant.
EP76M	100/100	"A" gray "B" gray	paste	60	24-48 hrs @ RT 2-3 hrs @ 200°F	-60 to +250 °F	Electrically conductive (nickel filled) epoxy adhesive/sealant. Convenient mix ratio.
EP77M-F	100/100	"A" silver "B" silver	smooth paste	5-10	4-8 hrs @ RT	-60 to +250 °F	Electrically conductive, silver filled epoxy adhesive/sealant. Convenient mix. Very fast cure time.
EP110F6	50/100	"A" clear "B" amber	15,000-20,000	12-24 hrs @ RT	60-90 min @ 150°F plus 6-8 hrs @ 300°F	-55 to +155 °C	For sealing and potting. Superior thermal shock resistance. Meets MIL-I-16923C. Requires heat cure.
EP112	100/80	"A" clear "B" clear	300-400	>24 hrs	2-3 hrs @ 200°F plus 6-10 hrs @ 300°F	-60 to 500 °F	Extraordinary electrical insulation properties. Clear, ultra-thin sealant/encapsulant.. Non-yellowing. Requires heat cure.
EP121CL	100/80	"A" clear "B" clear	2,000-3,000	>24 hrs	3 hrs @ 200°F plus 8-10 hrs@300°F	-60 to 500 °F	Low viscosity, 500 °F potting/impregnant. Exceptional electrical insulation properties. Requires heat cure.
EP121AO	100/80	"A" white "B" white	35,000-45,000	12-24 hrs	3 hrs @ 200 °F plus 8-10 hrs @ 300 °F	-60 to 500 °F	Thermally conductive version of EP121CL. For high temperature potting & encapsulation. Requires heat cure.
EP125	100/50	"A" gray "B" yellow powder	paste	not applicable	1 hr @ 180°F plus 1 hr @ 300°F plus 2 hrs @ 400°F	-60 to 600 °F	Super high temperature resistant system capable of 600°F temperature service. Requires heat cure.
Black Magic HT	100/100	"A" black "B" black	paste	60	24-48 hrs @ RT	-60 to +400 °F	For durable, high performance, abrasion resistant coatings, liners and sealant.
SuperGel #7	100/100	"A" clear "B" clear	500	> 3 hrs	48-72 hrs @ RT 3 hrs @ 200°F	-60 to +200 °F	Soft, resilient, transparent epoxy gel for encapsulation of electronic components and circuitry.
Supreme 11	100/100	"A" gray "B" tan	30,000-40,000	40-50	18-24 hrs @ RT 30-45 min @ 200°F	-100 to +275 °F	High peel strength, high performance epoxy adhesive system. Excellent thermal shock resistance.
Supreme 11AOHT	100/100	"A" gray "B" white	paste	25-50	24-36 hrs @ RT 1 hr @ 200°F	-100 to +400 °F	Thermally conductive version of Supreme 11HT. Convenient 1/1 ratio, good electrical insulation properties.
Supreme 11HT	100/100	"A" gray "B" tan	125,000- 135,000	20-30	18-24 hrs @ RT 30-45 min @ 200°F	-100 to +400 °F	Heat resistant version of Supreme 11. Good mechanical and physical strength properties.
Supreme 45HT	100/30	"A" tan "B" brown	65,000-75,000	12-24 hrs	1 hr @ 150°F plus 2-3 hrs @ 300°F	-80 to +450 °F	Toughened version of EP45HT. Well suited for bonding dissimilar substrates. Superb sealant. Requires heat cure.
Supreme 45HTQ	100/30	"A" tan "B" brown	100,000- 120,000	12-24 hrs	1 hr @ 150°F plus 3-4 hrs @ 300°F	-80 to +450 °F	Mineral filled version of Supreme 45HT. Enhanced dimensional stability. Requires heat cure.
SteelMaster 43HT	100/20	"A" dark gray "B" tan	thixotropic paste	20-30	24 hrs @ RT 1-2 hrs @ 200°F	-60 to +400 °F	Machinable, stainless steel filled, for repairing metallic parts & bonding carbide to steel. Ultra high compressive strength.

Master Bond Inc.

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