

# MASTER BOND ONE COMPONENT SERIES APPLICATION SELECTOR GUIDE

Select One Component Epoxy Adhesives, Sealants, Coatings, Encapsulants & Potting Compounds

Partial Listing Only — Other Grades Available

Master Bond Grade	Viscosity RT, cps	Color Code	Storage Stability, RT	Cure Schedule Temp/Time, °F	Service Temp Range, °F	Applications
EP3FL	60,000- 70,000	yellow to amber	3 months@75°F 6 months@40°F	5-10 min @ 300°F 20-30 min @ 250°F	4°K to 250°F	Flexible adhesive, sealant and encapsulant. Good electrical properties. Outstanding thermal cycling and thermal shock resistance. Cryogenically serviceable.
EP3HT	>250,000	yellow to brown	6 months	5-10 min @ 300°F 20-30 min @ 250°F	-60 to 400°F	Rapid curing, heat resistant, general purpose adhesive/sealant. Superior physical and electrical properties. Ideal for manufacturing applications. Bonds well to a broad range of substrates.
EP3HTFL	>150,000	yellow to amber	3 months@75°F 6 months@40°F	5-10 min @ 300°F 20-30 min @ 250°F	-100 to 350°F	Flexibilized version of EP3HT for bonding, sealing & potting. Enhanced thermal shock resistance. Good electrical properties.
EP3HTMED	>200,000	tan or brown	6 months	5-10 min @ 300°F 20-30 min @ 250°F	-60 to 400°F	Fast curing, Class VI approved adhesive, sealant & encapsulant. Excellent physical strength profile. Resists various types of sterilization, particularly cold sterilants.
EP3RR-1	120,000- 150,000	light yellow	3 months@75°F 6 months@40°F	5-10 min @ 300°F 20-30 min @ 220-230°F	-60 to 400°F	Toughened system featuring rapid curing, good thermal conductivity & heat resistance. Excellent flowability. Primarily for potting & underfill applications. Castable over 1 inch thick.
EP3SP5FL	80,000- 90,000	yellow to brown	6 weeks	1 min @ 300°F 20 sec @ 400°F	-60 to 250°F	"Snap" cure version of EP3FL. Fastest curing system available. Ideal for high speed manufacturing & production. Good physical properties. Bonds well to most substrates.
EP11HT	150,000- 160,000	tan	6 months	60-90 min @ 300°F 90-120 min @ 250°F	-60 to 400°F	High temperature resistant structural adhesive. Good thermal & dimensional stability. High tensile shear strength.
EP13	paste	gray	6 months	60-90 min @ 300-350°F	-60 to 450°F	High performance structural adhesive. Outstanding temperature resistance up to 450°F. Non-drip application feature. Very high compressive strength. Readily machinable.
EP15	90,000- 100,000	tan	3 months minimum	60-90 min @ 300-350°F	-60 to 250°F	Very high tensile strength (>12,000 psi) system for testing adhesion or cohesive strength of flame-sprayed coatings as per ASTM specification C 633-69.
EP19HT	600	amber clear	4 months	45 min @ 300°F 60 min @ 250°F	-60 to 400°F	Low viscosity impregnant, sealant, coating and laminating epoxy. Good mechanical & electrical insulation properties. Frequently used to impregnate graphite and for transformer steel laminations.
EP36	semi-solid	tan	6 months	melts at 180°F, cures at 250-300°F for 90-120 minutes, uncured material reusable	-100 to 500°F	Unique B stage type epoxy system. Combines superb temperature resistance with high flexibility & elongation. Superior dielectrics. Exceptional thermal cycling properties. Passes Class H thermal insulation requirements. Good flowability. Excellent potting epoxy.
EP36AO	semi-solid	light tan	6 months	melts at 180°F, cures at 250-300°F for 90-120 minutes, uncured material reusable	-100 to 500°F	Thermally conductive version of EP36. Semi-flexible. For potting and encapsulation. Good heat transfer properties. Suitable for moderate size castings. Good mechanical and thermal shock resistance. Passes Class H thermal insulation tests.
EP101HTX-3	1,000- 1,500	clear with fluorescent dye	6 weeks	2-6 hrs @ 250°F followed by 6-10 hrs @ 300°F	-60 to 500°F	Very low viscosity, impregnant, coating and encapsulation epoxy. Excellent dielectric properties. Very low dissipation factor. Exceptionally high temperature resistance.
FL901AO	film	gray	6 months@40°F	1 hr @ 250°F 30-40 min@300°F	-100 to 400°F	Thermally conductive film adhesive/sealant. Standard size is 2" x 6" x 3 mils thick. Other sizes and die/laser cuts available.
FL901S	film	silver	6 months@40°F	1 hr @ 250°F 30-40 min@300°F	-100 to 400°F	Electrically conductive film adhesive/sealant. Low resistance. Standard size is 2" x 6" x 3 mils thick. Other sizes and die/laser cuts available.

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Supreme 3HT	120,000-135,000	yellow to brown	6 months	5-10 min @ 300°F 20-30 min @ 250°F	-100 to 350°F	Toughened version of EP3HT. Exceptionally well suited for bonding dissimilar substrates. Excellent mechanical and thermal shock resistance. Good thermal cycling properties.
Supreme 3AOHT	paste	off-white to light yellow	6 months	5-10 min @ 300°F 20-30 min @ 250°F	-100 to 350°F	Thermally conductive adhesive/sealant. Good mechanical and electrical insulation properties. Rapid curing. Well suited for bonding substrates with different coefficients of expansion.
Supreme 3HTND-1SM	thixotropic paste	light yellow	6 months	5-10 min @ 300°F	-60 to 350°F	Rapid curing, high strength surface mount adhesive. Low ionic impurities. Supplied in syringes for convenient manual or automatic dispensing. "No tailing" application feature.
Supreme 3HTND-2GT	thixotropic paste	light yellow	6 months	5-10 min @ 300°F	-60 to 350°F	High performance glob top offering superb protection for circuitry and components including fragile ones. Low ionic impurities. Convenient syringe packaging for manual or automatic dispensing.
Supreme 10HT	>250,000	gray	6 months	45 min @ 300°F 60 min @ 250°F	4°K to 400°F	High performance adhesive/sealant. Ultra high bond strength (shear & peel), NASA low outgassing approved. Cryogenically serviceable. Outstanding toughness and durability.
Supreme 10HTF	>250,000	gray	3 months@40°F	5-10 min @ 300°F 20-30 min @ 230°F	4°K to 400°F	"Snap cure" version of Supreme 10HT with similar physical and electrical properties. Cures in 2 minutes at 375°F. Also available in nickel and silver filled versions.
Supreme 10AOHT	paste	light gray	6 months	45 min @ 300°F 60 min @ 250°F	-100 to 400°F	Thermally conductive version of Supreme 10HT (about 10 BTU·in/ft <sup>2</sup> ·hr·°F). Good electrical insulation properties. Excellent dimensional stability and toughness.
Supreme 10ANHT	paste	gray	6 months	45 min @ 300°F 60 min @ 250°F	-100 to 400°F	High thermally conductive version of Supreme 10HT (>22 BTU·in/ft <sup>2</sup> ·hr·°F). Superior physical and electrical properties.
Supreme 10HT-1	120,000-140,000	gray	6 months	45 min @ 300°F 60 min @ 250°F	4°K to 400°F	Special toughened version of Supreme 10HT. Enhanced thermal cyclability, mechanical & thermal shock resistance. Excellent physical strength properties. Cryogenically serviceable.
Supreme 10HTLVCL	30,000-40,000	amber	6 months	45 min @ 300°F 60 min @ 250°F	-100 to 400°F	Lower viscosity version of Supreme 10HT. Good flowability. Serviceable as an adhesive, sealant or encapsulant.
Supreme 10HTN	paste	nickel gray	3 months	45 min @ 300°F 60 min @ 250°F	-100 to 400°F	Nickel filled version of Supreme 10HT with 5-10 ohm-cm resistance. Superior physical strength properties and chemical resistance. For bonding, sealing and shielding.
Supreme 10HTND-2	paste	gray	6 months	45 min @ 300°F 60 min @ 250°F	-100 to 400°F	Paste version of Supreme 10HT. Non-drip application feature. Will not flow when heat cured.
Supreme 10HTS	paste	silver	3 months	45 min @ 300°F 60 min @ 250°F	4°K to 400°F	Silver filled version of Supreme 10HT. Very low resistance (<1 milliohm). Passes NASA low outgassing tests. Cryogenically serviceable. Exceptionally high shear & peel strength.

## Master Bond Inc.

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