MASTER BOND ELECTRICALLY CONDUCTIVE PRODUCT SELECTOR GUIDE

Selected Adhesives, Sealants & Coatings Specially Formulated for Electronic Applications
Partial Listing Only —— Other Grades Available

Two Component Epoxies —

Master Bond Grade	Mix Ratio by weight	Mixed Viscosity RT, cps	Set-Up Time Minutes, RT	Cure Schedule Temp/Time, °F	Service Temp Range, °F	Filler	Volume Resistivity ohm-cm	Applications
EP21TDCN	100/100	paste	45-60	24-48 hrs @ RT 2 hrs @ 200°F	-100 to +275°F	nickel	5-10	Excellent general purpose nickel filled adhesive/sealant. High shear & peel strength. Convenient handling.
EP21TDCNFL	100/100	paste	60-75	24-48 hrs @ RT 2-3 hrs @ 200°F	4°K to +250°F	nickel	5-10	High flexibility version of EP21TDCN. High peel strength. Good shock & vibration resistance. Cryogenically servicable.
EP21TDCS	100/100	paste	30-40	24-36 hrs @ RT 1-2 hrs @ 200°F	4°K to +275°F	silver	$<10^{-3}$	High performance adhesive/sealant. Convenient handling, excellent physical strength properties. High peel and shear strength. Widely used in microelectronics.
EP21TDCSFL	100/100	paste	45-60	24-48 hrs @ RT 2-3 hrs @ 200°F	4°K to +250°F	silver	$<10^{-3}$	Unique formulation, high flexibility version of EP21TDCS, exceptionally high elongation. Very high peel strength. Cryogenic serviceability. Easily repairable.
EP21TDCS MED	100/100	smooth paste	25-30	24 hrs @ RT 1-2 hr @ 200°F	4°K to +250°F	silver	$<10^{-3}$	Class VI approved medical grade formulation. Excellent physical properties. Widely used in medical electronics.
EP30C	100/5	paste	20-30	24 hrs @ RT 1-2 hrs @ 200°F	-60 to +300°F	nickel	5-10	Special nickel filled system featuring excellent shear strength and superior chemical resistance.
EP51N	100/100	paste	5-10	8-12 hrs @ RT 30-45 min @ 200°F	-60 to +250°F	nickel	5-10	Fast setting nickel filled adhesive/sealant. Adheres well to a wide variety of substrates. Good durability.
EP75-1	100/15	paste	60	24-48 hrs @ RT 1-2 hrs @ 200°F	-60 to +250°F	graphite	50-100	General purpose graphite filled system. Cost effective adhesive/sealant and coating for EMI / RFI type applications. Utilized when non-metallic filler is required.
EP76M	100/100	paste	45-60	24-48 hrs @ RT 2 hrs @ 200°F	-60 to +250°F	nickel	5-10	Easy to use, 1:1 system. Excellent adhesive/sealant. Superior physical and mechanical strength properties.
EP76MHT	100/100	paste	45-60	24-48 hrs @ RT 2 hrs @ 200°F	-60 to +400°F	nickel	5-10	High temperature resistant version of EP76M. Serviceable to 400°F. Convenient processing.
EP76M-F	100/100	paste	4-6	6-10 hrs @ RT 20-30 min @ 200°F	-60 to +250°F	nickel	5-10	Slightly faster setting version of EP51N. Convenient 1 to 1 mix ratio. Well suited for manufacturing.
EP77M-1	100/8	paste	20-30	24 hrs @ RT 1-2 hrs @ 200°F	-60 to +250°F	silver	$<10^{-3}$	Silver filled adhesive/sealant for mil spec applications. High shear strength. Enhanced chemical resistance.
EP77M-F	100/100	paste	5-10	4-6 hrs @ RT	-60 to +250°F	silver	$<10^{-3}$	Fast setting, silver filled system. Convenient handling. Particularly useful in manufacturing, circuit board repair and other applications where rapid tack is required .
EP78	100/100	paste	30-45	24-48 hrs @ RT 2 hrs @ 200°F	-60 to +250°F	silver coated microspheres	<0.5	Cost effective, low resistance adhesive/sealant system. Bonds well to a large number of substrates.
EP79	100/100	paste	45-60	24-48 hrs @ RT 2 hrs @ 200°F	4°K to +275°F	silver coated nickel	<0.04	Low resistance, cost effective alternative to silver filled systems. Excellent physical properties.
EP80	100/100	paste	45-60	24-48 hrs @ RT 2 hrs @ 200°F	4°K to +275°F	silver coated copper	<0.02	A second cost effective alternative to silver. Slightly lower resistance than EP79.

One Component Epoxies —

Master Bond Grade	Viscosity RT, cps	Shelf Life	Cure Schedule Temp/Time, °F	Filler	Service Temp Range, °F	Vol. Resistivity ohm-cm	Applications
Supreme 10HTN	paste	3 months	1 hr @ 250°F 45 min @ 300°F	nickel	-100 to +400°F	5-10	Superior adhesive/sealant. Good physical strength properties. Excellent for thermal cycling. High temperature serviceability
Supreme 10HTS	paste	3 months	1 hr @ 250°F 45 min @ 300°F	silver	4°K to +400°F	$<10^{-3}$	High performance adhesive/sealant. NASA approved for low outgassing. Excellent shear & peel strength. Cryogenically serviceable. Widely used in microelectronics. Can withstand up to 400°F. Screen printable
Supreme 10HTFN	paste	3 months in cans refrigerated	5-10 min @ 300°F 2 min @ 400°F	nickel	-100 to +400°F	5-10	"Snap curing" version of Supreme 10HTN. Cost effective. For high volume manufacturing or production. ***Requires refrigeration.***
Supreme 10HTFS	paste	3 months in syringes & jars (refrigeration required)	5-10 min @ 300°F 2 min @ 400°F	silver	4°K to +400°F	$<10^{-3}$	"Snap curing" version of Supreme 10HTS. Widely used in manufacturing, surface mount applications & repair situations. Cryogenically serviceable. Excellent physical strength properties. ***Requires refrigeration.***
FL901S	film	6 months refrigerated	1 hr @ 250°F 30-40 min @ 300°F	silver	-100 to +400°F	<0.0002	High performance film adhesive/sealant. Exceptionally convenient handling. Low resistance. Standard size is 2" x 6" x 3 mils thick. Other sizes and die cuts available.

Miscellaneous —

Master Bond Grade	Type of System	Cure Type	Shelf Life	Cure Schedule Temp/Time, °F	Viscosity RT, cps	Service Temp Range, °F	Filler	Surface Resistivity (ohm²)	Applications
AC82	acrylic	solvent evaporation	3 months	2-4 hrs @ RT	flowable	-60 to +300°F	nickel	1-3	Reliable EMI / RFI shielding for metals, plastics and ceramics. Shielding effectiveness >60 dB.
AC83	acrylic	solvent evaporation	3 months	2-4 hrs @ RT	paste	-60 to +300°F	graphite	10-25	Low cost EMI / RFI shielding for metals, plastics and ceramics. Shielding effectiveness >40 dB.
AC84	acrylic	solvent evaporation	3 months	2-4 hrs @ RT	thixotropic	-60 to +300°F	copper	0.05-0.08	Highly effective EMI / RFI shielding for use in controlled atmospheres. Shielding effectiveness >70 dB.
AC85	acrylic	solvent evaporation	3 months	2-4 hrs @ RT	paste	-60 to +300°F	silver	<0.01-0.03	Maximum EMI / RFI shielding effectiveness for metals, plastics and ceramics. Shielding effectiveness >75 dB.
X5G	rubber	solvent evaporation	3 months	2-4 hrs @ RT	flowable	-80 to +250°F	graphite	10-25	Low cost adhesive, sealant and coating. Good bond strength and chemical resistance. Cures flexible. Shielding effectiveness >40dB.
X5N	rubber	solvent evaporation	3 months	2-4 hrs @ RT	flowable	-80 to +250°F	nickel	0.08-2	Versatile high performance adhesive/sealant . High strength bonds to most substrates. Flexible coating system with shielding effectiveness of >60dB.
X5SC	rubber	solvent evaporation	3 months	2-4 hrs @ RT	paste	-80 to +250°F	silver	<0.01-0.03	Highest performance rubber based adhesive/sealant. Excellent peel strength and durability. Cures as a flexible coating with shielding effectiveness of >75dB.
LTX117G	latex	water evaporation	6 months	4-6 hrs @ RT	paste	-60 to +250°F	graphite	15-25	Low cost water-based adhesive, sealant and coating. Shielding effectiveness as a coating is >40dB.
LTX117N	latex	water evaporation	6 months	4-6 hrs @ RT	flowable	-60 to +250°F	nickel	2-4	High strength water-based adhesive, sealant & coating with shielding effectiveness >60dB.

Master Bond Inc.

Adhesives, Sealants & Coatings • 154 Hobart Street • Hackensack, N.J. 07601 • Tel: 201-343-8983 • Fax: 201-343-2132

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