

# Hot Melt Stick & Applicator Guide

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## ELLSWORTH ADHESIVES

Ellsworth Adhesives offers a variety of hot melt stick formulas from the top manufacturers in many different formats to meet your application needs. These adhesive technologies include EVAs, acrylics, polyamides, APAOs, and more. Our diverse line of electric and pneumatic hot melt applicators and accessories ensure accuracy and repeatable delivery.

Ellsworth Adhesives is a global corporation specializing in the distribution of specialty chemicals and equipment. We offer a wide range of hot melts, adhesives, sealants, lubricants, coatings, encapsulants, tapes, soldering products, surface preparations, maintenance materials, and more. Ellsworth Adhesives not only offers an extensive line of products to meet market demands, but is the only integrator of its kind specializing in the supply and logistics of specialty chemicals.

To place an order or for more information, please contact an Ellsworth Adhesives representative at 1(800) 888-0698 or email info@ellsworth.com.





3M	Description & Application	Color / Chemistry	Appl. Temp (°F)	Open Time	Sizes
3762LM	Excellent hot tack, fast setting for corrugated, beadboard, and re-sealing boxes. Economical, general purpose low melt.	Light Amber / EVA	250 - 270	25 seconds	<sup>5</sup> ⁄8" x 2"TC <sup>5</sup> ⁄8 x 8" Q I" x 3" PG
3776LM	Low melt for bonding a variety of plastics, woods, and light gauge metals.	Tan / EVA	250 - 270	40 seconds	5⁄8" x 8" Q I" x 3" PG
3792LM	Multipurpose low melt for wood, coated paper, polyolefins, and heat sensitive substrates. ULV2.	Clear / EVA	250 - 270	40 seconds	5%" x 2"TC 5%" x 8" Q I" x 3" PG
3798LM	Removable low melt for use on many substrates.	Light Yellow/ EVA	250 - 270	30 seconds	5∕8" x 2"TC
3731	Plastic bonder for polyethylene and polypropylene with high heat resistance.	Tan / Polyolefin	350 - 385	30 seconds	⁵⁄%" x 8" Q I" x 3" PG
3738	General purpose for foundry sand cores, wood bonding, corrugated, some plastics, and chipboard. ULV2.	Tan / EVA	350 - 385	50 seconds	½" x I2" AE 5%" x 2"TC 5%" x 8" Q I" x 3" PG
3747	General purpose for a wide variety of plastics, wood, and lightweight metals.	Tan / EVA	350 - 385	45 seconds	1/2" x 12" AE 5%" x 2" TC 5%" x 8" Q 1" x 3" PG
3748	Good thermal shock resistance. Non-corrosive to copper for many electronic applications. Bonds to polyolefin. ULV2.	Off-White / Polyolefin	350 - 385	45 seconds	5∕%" x 2"TC 5⁄%" x 8" Q I" x 3" PG
3748VO	Self-extinguishing version of 3748. Meets UL 1410. ULV0.	Light Yellow / Polyolefin	350 - 385	30 seconds	5⁄%" x 2" TC 5⁄%" x 8" Q I" x 3" PG
3750	Low viscosity for high flow rate, increased production. Good hot tack, quick grab for packaging and woodworking.	Tan or Clear / EVA	350 - 385	N/A	1/2" × 10" AE
3762	Excellent hot tack, fast setting for corrugated, beadboard, re- sealing boxes, and re-packing chipboard and wood. ULV2.	Tan / EVA	350 - 385	35 seconds	5⁄%" x 2"TC 5⁄%" x 8" Q I" x 3" PG
3764	Bonds a wide variety of plastics including polycarbonate, polyethylene, and polypropylene. Flexible at low temperatures. ULV2.	Clear / EVA	350 - 385	40 seconds	5⁄8" x 2"TC 5∕8" x 8" Q I" x 3" PG
3779	High heat resistance, high strength. Good fuel and oil resistance. Electronics applications. ULV0.	Amber / Polyamide	350 - 385	25 seconds	5⁄%" x 2"TC 5⁄%" x 8" Q I" x 3" PG
3789	High performance for plastics. Good impact resistance. Bonds vinyl and wood. Good fuel and oil resistance. ULV2.	Brown / Polyamide	350 - 385	50 seconds	5∕%" x 8" Q I" x 3" PG
3792	Multi-purpose for wood, corrugated, fabric, furniture, upholstery, novelties, and other light weight materials. ULV2.	Clear / EVA	350 - 385	50 seconds	5⁄8" x 2"TC 5∕8" x 8" Q I" x 3" PG
3797	High ball and ring. Low viscosity, good for electrical potting. ULV2.	Off-White / Polyolefin	350- 385	30 seconds	5⁄%" x 2" TC I" x 3" PG





Bostik	Description & Application	Color / Chemistry	Appl. Temp (°F)	Open Time	Sizes
HM0130	Medium open time, used for general assembly bonds and difficult substrates, including ABS. Improved resistance to yellowing and UV exposure.	Semi-Clear / EVA	350 - 400	30 seconds	½" x 10"
HM0720	Highly versatile, bonds to a wide variety of substrates at low temperatures. Good for open or closed-cell foams, styrene, and EPS for specialty packaging.	Semi-Clear / EVA	280 - 400	20 - 30 seconds	½" x 15"  " x 3"
HM2107	Tough, versatile adhesive with low odor for packaging, furniture assembly, some plastic bonding (porous substrates).	Straw / EVA	392	20 seconds	½" x 10"  " x 3"
HM2109	Long open time, medium setting, good wettability and flexibility. Good hot tack for corrugated and packaging applications.	Tan / EVA	300	20 - 30 seconds	½" x 10"  " x 3"
HM2124	Excellent adhesion to many substrates, long set time, flexible for porous and non-porous substrates.	Translucent / EVA-PE	350 - 400	30+ seconds	½" x 10" or 15"  " x 3"
HM6239	Long open time with high and low temperature resistance, flexibility and resistance to plasticizer migration for vinyl bonding.	Amber / Polyamide	350 - 400	75 seconds	½" x 10"
HM6305	Economical, fast setting adhesive for packaging applications. Excellent quick-tack and good heat resistance for packaging.Adheres to a wide variety of coated and uncoated board stocks.	Pale Yellow / EVA	335 - 360	3 - 8 seconds	½" x 15"
HM6327	Craft, floral, hobby, and other general assembly. Flexible bonds to porous substrates like woods, fabrics, carpeting, and some plastics.	Translucent / EVA	350 - 400	20 - 30 seconds	½" x 15"
HM6363	General assembly and automotive applications. All purpose, high performance, flexible bonds to many substrates for product assembly of dissimilar or difficult materials to bond.	Pale Yellow / EVA	350 - 400	40+ seconds	½" x 15"
HM6368	Short open time with good shear strength and good adhesion to porous materials. High viscosity with wide temperature resistance. For demanding packaging, product assembly, and repair applications.	Light Amber / PE Blend	350 - 400	5 - 10 seconds	½" x 15"
HM6390	Medium open time for general assembly. Bonds well to a variety of substrates, including ABS, lexan, polyethylene, and phenolics.	Pale Yellow / EVA	350 - 400	20 - 30 seconds	½" x 15"



#### elemelt

Elemelt	Description & Application	Color / Chemistry	Appl. Temp (°F)	Open Time	Sizes
HMS425	APAO with a long open time for bonding foam to foam, foam to fabric, and other porous substrates. Can be extruded or sprayed.	Off-White / APAO	350 - 375	3 - 7 minutes	½" x 10" 5∕8" x 15"
HMS600	General purpose. Bonds many woods & wood composites for woodworking & cabinetry.	Amber / EVA	350 - 400	40 - 50 seconds	1⁄2" x 10" or 15"
HMS601	Low melt for packaging & carton sealing. Bonds to most porous materials.	Tan / EVA	250 - 300	5 seconds	½" x 10" or 15" 5%" x 10" 5%" x 8" Quad
HMS701	Fast set for corrugated carton sealing. Low temperature resistance. Bonds most porous materials (wood, paper, cloth).	Amber / EVA	250 - 380	15 seconds	½" x 10" or 15" 5%" x 10" 1¾" x 1¾" 5%" x 8" Quad 1" x 3"
HMS702	Fast set for corrugated carton sealing & small packaging. Good adhesion to some corrugated packaging & paper products.	Amber / EVA	250 - 380	5 seconds	½" x 10" or 15"
HMS707	High performance for difficult substrates (porous or non-porous). Bonds glass, leather, metals, magnets, ceramics, wood, ABS, PVC, & some vinyls.	Clear or Black / EVA	380	30 seconds	½" x 10" or 15" 5⁄8" x 10"
HMS711	Excellent hot tack, fast set packaging. Good adhesion to plain & some corrugated packaging.	Tan / EVA	380	5 - 10 seconds	½" x 10" or 15" 5⁄%" x 10" 1" x 3"
HMS735	High strength for metal, plastics, & non-porous substrates. Bonds leather, wood, ceramic, & non- porous materials.	Amber / EVA	325 - 380	25 seconds	½" x 10" or 15" 5⁄8" x 10" 1" x 3"
HMS739	High strength wood bonder & dent remover. Bonds metals, plastics, ceramics, & non-porous materials.	Amber / EVA	325 - 380	25 seconds	½" x 10" or 15"
HMS748	Polyamide bonder for most plastics & woods (high temperatures) & paper, fabric, & ribbons (low temperatures). Resistant to oils, transmission fluids, brake fluid, & fuels.	Amber or Black / Polyamide	275 - 380	15 seconds	½" x 10" or 15"
HMS800	General purpose with excellent hot tack for packaging. Strong bonds to most papers & other porous materials.	Translucent / EVA	350 - 400	25 - 35 seconds	½" x 10" or 15"
HMS900	General purpose for assembly of plastics & woods at high temperatures. Bonds to porous & non- porous materials at low temperatures.	Clear / EVA	250 - 380	60 seconds	½" x 10" or 15" 5%" x 8" Quad 1" x 3"
HMS925	High performance acrylic with long open time. Makes flexible bonds on hard-to-bond substrates like concrete, metal, wood, vinyl, glass, and ceramic.	Clear / Acrylic	350 - 390	60 seconds	½" x 10"





Power Adhesives	Description & Application	Color / Chemistry	Appl. Temp (°F)	Open Time	Sizes
5	High delivery, low viscosity. Long open time for product assembly.	Light Brown / Synthetic Polymer	266 - 383	Long	<sup>1</sup> /2",   <sup>3</sup> /4"
14	High delivery, very fast setting packaging adhesive.	Pale Amber / Synthetic Polymer	320 - 383	Short	<sup>1</sup> /2", <sup>5</sup> /8",   <sup>3</sup> /4"
1942	Product assembly adhesive for wood and many plastics	Amber / Synthetic Polymer	320 - 386	Long	<sup>1</sup> /2", <sup>5</sup> /8",   <sup>3</sup> /4"
IX	Medium viscosity, wood working and packaging adhesive.	Light Brown / Synthetic Polymer	356 - 383	Medium	<sup>1</sup> /2",   <sup>3</sup> /4"
213	Economical, general purpose adhesive. Suitable for ceramics, rigid PVC, & polystyrene.	Pale Amber / Synthetic Polymer	383	Long	1/2", 5/8", 1 3/4"
214	Economical, fast setting packaging adhesive.	Pale Amber / Synthetic Polymer	383	Short	<sup>1</sup> /2", <sup>5</sup> /8",   <sup>3</sup> /4"
23	Medium viscosity multi-purpose adhesive. For fabric, hard and soft wood, and plastics.	Pale Amber / Synthetic Polymer	383	Long	<sup>1</sup> /2", <sup>5</sup> /8",   <sup>3</sup> /4
232	Economical, high viscosity, general purpose adhesive. For fabrics, wood, cardboard, and plastics.	Clear / Transparent Synthetic Polymer	383	Medium	<sup>1</sup> /2", <sup>5</sup> /8",   <sup>3</sup> /4"
240	Multi-temperature, long open time, multi-purpose. For many plastics and light gauge metals.	Clear & 12 Colors / Synthetic Polymer	380	Long	<sup>1</sup> /2", <sup>5</sup> /8",   <sup>3</sup> /4"
246	High performance adhesive for painted, varnished, and other smooth surfaces.	Clear or Black / Synthetic Polymer	383	Medium	1/2 "
248	Very high performance, acrylic based adhesive. Excellent adhesion to smooth and shiny surfaces.	Clear / Acrylic	383	Long	<sup>1</sup> /2", <sup>5</sup> /8",   <sup>3</sup> /4"
260	High performance, long open time, tough, and flexible. For ceramics, plastics, and woods.	Light Brown / Synthetic Polymer	383	Long	<sup>1</sup> /2 <sup>11</sup> , <sup>5</sup> /8 <sup>11</sup> ,   <sup>3</sup> /4 <sup>11</sup>





Power Adhesives	Description & Application	Color / Chemistry	Appl. Temp (°F)	Open Time	Sizes
261	High performance, tough, and flexible. For use with ceramics and plastics (PP/PE), and woods.	Pale Amber / Synthetic Polymer	380	Long	½",   ¾"
263	Polypropylene bonding with high heat resistance.	Light Brown / Synthetic Polymer	374 - 392	Short	1/2"
341	Medium viscosity, fast setting with instant grab. Suitable for packaging and woodworking.	White / Synthetic Polymer	380	Short	1/2", 5/8",   3/4"
342	High viscosity, fast setting with instant grab. Suitable for heavy duty carton board & cable attachment.	White / Synthetic Polymer	383	Very Short	1/2",   3/4"
LM44	Low melt, fast setting, high performance. Ideal for expanded polystyrene, thin films, and balloons.	White / Synthetic Polymer	266 - 320	Short	1/2",   3/4"
410	Pallet stabilization spray adhesive, also used for expanded polystyrene assembly and position fixing.	Off-White / Synthetic Polymer	380	Up to 1 minute	3/4"
420	General purpose, extended open time spray adhesive. Used for bonding packaging foams, bubble film, vacuum foamed moldings, upholstery foams, cotton backed vinyl, and many other fabrics.	Off-White / Synthetic Polymer	380	Up to 3 minutes	¾"
425	High performance, extended open time adhesive. Used for bonding wood, fabrics, most plastics, some metals, and concrete with a good delivery rate.	Dark Amber / Synthetic Polymer	380	Up to 3 minutes	3/4"
430	Very long open time spray adhesive. Aggressive to produce tough resilient bonds. Suitable for use on plastics, foams, wood, and cardboard.	Amber / Synthetic Polymer	380	Up to 6 minutes	¾"



Loctite	Description & Application	Color / Chemistry	Appl. Temp (°F)	Open Time	Sizes
PA 7460	Formulated for spray applications. High heat resistance, fast set time. Suitable for bonding foams, fabrics, wood, and more.	Pale Amber / Polyamide	350 - 400	30 seconds	I ¾" Polyshot
PA 7804	Tough, elastomeric high performance adhesive with excellent impact at low temperatures. Bonds to metals, wood, plastics, leather, fabric, non-woven fabric, and foils. Good for gap filling.	Amber / Polyamide	350	35 seconds	½" x 10" Supersticks I ¾" Polyshot
PA 7809FR	Tough, high performance adhesive modified with FR materials. Bonds many difficult substrates like metals, plastics, wood, leather, fabric, non-woven fabric, films, and foils. UL 94-V0.	Amber / Polyamide	400 - 450	35 seconds	½" x 10" Supersticks I ¾" Polyshot
0430	Spray adhesive for bonding expanded polystyrene, polyethylene, or urethane foams. Good for replacing aerosols.	Cream or Red / EVA	350	3.5 minutes	I ¾" Polyshot
0450	Spray adhesive with aggressive bond for expanded polystyrene or urethane foams, corrugated, wood, fabrics, and plastics.	Natural or Red/ Polyolefin	350	5 to 8 minutes	I ¾" Polyshot
1942	General purpose for bonding wood, nylon, polycarbonate, PVC, polystyrene, ABS, and acrylic.	Tan / EVA	350	30 seconds	<sup>1</sup> ⁄2" x 10" Supersticks I ³⁄4" Polyshot
232	Medium setting adhesive recommended where clear, tough, flexible materials are required. Suitable for plastic, porous surfaces such as paper, plastic, and wood.	Clear / EVA	350	15 seconds	<sup>1</sup> /2" x 10" Supersticks I <sup>3</sup> /4" Polyshot
IX	Medium to fast setting adhesive recommended for porous substrates such as paper, wood, fabric, non-wovens, and foam.	Yellow / EVA	350	15 seconds	½" x 10" Supersticks I ¾" Polyshot
740LV	Fast setting adhesive for packaging and fabric reinforcing applications.	Yellow / EVA	350	10 seconds	I ¾" Polyshot

## Stick & Applicator Reference Chart

Hot Melts			Applicators		
½" x 10" or 15"	Ellsworth Adhesives EA100-12	Power Adhesives 806-12	Fastenmaster HB220	Surebonder Pro9700A	Surebonder MGG-450
	Bostik TG-4	Bostik Thermogrip TG-560	3M AE II	Ad-Tech Pro 200	
5⁄8" x 10" or 15"	Ellsworth Adhesives EA100-58	Surebonder Pro2-500	Power Adhesives 806-15	Power Adhesives 820-15	Surebonder MGG-500
I" × 3"	3M PG II Applicator				
¾" x  ¾"	Power Adhesives Tec 3400 Extrude	Power Adhesives Tec 6100 Extrude	Power Adhesives Tec 7100 Extrude	Power Adhesives Tec 6300 Spray	Power Adhesives Tec 7300 Spray
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5∕8" x 8" Quad	3M EC Applicator	3M TC w/Quadrack			

## Compatible Nozzle Chart

Nozzle	Nozzle Diameter / Outlet mm/inch (ID)	Nozzle Length mm/inch	Thread Size (inch)	Description
Power Adhesives ADJ012	6.0 / 2.3 wide	30 / 1.2	7∕16 UNF	Ball Valve Steel / Ribbon Extension Copper Nozzle
Power Adhesives ADJ013	3.0 / .1 l orifice	30 / 1.2	7∕16 UNF	Ball Valve Steel / Angled Extension Copper Nozzle
Power Adhesives ADJ014	1.25 / .049 orifice	30 / 1.2	7∕16 UNF	Ball Valve Steel / Precision Extension Copper Nozzle
Power Adhesives ADJ023	3.5 / .13 orifice	15 / .60	7/16 UNF	Ball Valve Steel Hub / Standard Aluminum Nozzle
Power Adhesives ANZ016	2.0 / .13 orifice	15 / .60	7/16 UNF	Ball Valve Steel Hub / Standard Aluminum Nozzle
Power Adhesives ADJ010	2.0 / .08 orifice	12 / .47	7/16 UNF	Ball Valve / Standard Aluminum Nozzle
Power Adhesives MDJ016	2.0 / .08 orifice	12 / .47	7∕ <sub>16</sub> UNF	Oiler Valve / Standard Aluminum Nozzle
Power Adhesives MDJ018	1.25 / .05 orifice	5 / .20	7∕16 UNF	Oiler Valve / Standard Aluminum Nozzle with Copper Tip
Power Adhesives MDJ019	5.0 / .08 width	12 / .47	7/16 UNF	Oiler Valve / Short Aluminum Nozzle with Copper Ribbon Tip
Power Adhesives MDJ021	2.0 / .08 orifice	19 / .74	7∕16 UNF	Ball Valve / Standard Aluminum Extension Nozzle

## Compatible Nozzle Chart

Nozzle	Nozzle Diameter / Outlet mm/inch (ID)	Nozzle Length mm/inch	Thread Size (inch)	Description
FastenMaster PA-10-SPN28	2.0 / .07 orifice	57 / 2.2	7∕16 UNF	Ball Valve Steel Hub / Angled Injection Steel Nozzle
Surebonder MNR-23	3.0 / .1 I orifice	45 / 1.7	7/16 UNF	Ball Valve Steel / Standard Extended Steel Nozzle
Surebonder MNR-21	3.0 / .1 I orifice	38 / 1.5	7∕16 UNF	Ball Valve Steel / Standard Short Steel Nozzle
Surebonder 101 Valve	N/A	N/A	7∕16 UNF	Brass Check Valve (Required for 103N, 103R, & 103F Nozzles)
Surebonder 103N	2.0 / .08 orifice	36 / 1.4	<sup>5</sup> ∕16 - 24 UNF	Aluminum Hub / Brass Blunt Extension Nozzle (Requires 101 Valve)
Surebonder I03R	3.1 / .125 orifice	45 / 1.7	⁵⁄16 - 24 UNF	Steel Hub / Brass Angled Extension Nozzle (Requires 101 Valve)
Surebonder 103F	1.3 / .05 width	45 / 1.7	⁵⁄ <sub>16</sub> - 24 UNF	Steel Hub / Brass Ribbon Extension Nozzle (Requires 101 Valve)
3M 9234 KIT w/ 9921	9921 Nozzle / 2.2 / .09 orifice	Nozzle 18.5 / .73 Nozzle w/Valve 33 / 1.3	7∕16 UNF/ 7∕16 UNF	Aluminum Check Valve w/ Steel Fluted Nozzle (For use with 3M EC &TC applicators)
3M 9729 KIT w/ 9940	9940 Nozzle / 3.1 / .125 orifice	Nozzle 18.5 / .73 Nozzle w/Valve 66 / 2.6	<sup>7</sup> / <sub>16</sub> UNF/ <sup>33</sup> / <sub>64</sub> - 20 UNF	Brass / Aluminum Check Valve w/ Steel Fluted Nozzle (For use with 3M PG II applicator)
3M 9785	1.7 / .07 orifice	32.5 / 1.27	7∕16 UNF	Tapered Aluminum Nozzle
3M 9946	1.8 / .072 orifice	44.5 / 1.7	7∕16 UNF	Brass Nozzle







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