# Shaped hot melt Adhesives Guide



Power Adhesives manufactures a large range of shaped hot melt adhesives that are designed to be used with the tec range of glue guns, providing a high-performance, cost-effective application system.

Tecbond adhesives are used in almost all industries, including packaging, woodworking, construction, product assembly, electrical, automotive and flooring.

Selecting the correct adhesive for an application depends on a range of factors, including substrates, application requirements and cost. This guide is designed to aid the selection process by grouping the adhesives into their different application categories, and then listing the relevant data such as open time, viscosity and heat resistance so the adhesives can be compared and short listed for testing, based on the application.

Our tech services are always available to discuss any application requirements in more detail.

## Key for adhesives guide



#### Chemistry

The polymer the adhesive is based on.



#### Open time

Time available after application to make a bond.



### Application temp

Temperature at which the adhesive should be applied.



#### Viscosity

Indication of how much the adhesive flows.



#### Softening Point (SP)

Temperature at which adhesive starts to become molten.



### Heat Resistance (HR)

A guide to the heat resistance of the adhesive bond.



#### Low temp

Temperature at which the adhesive becomes brittle.



#### Colour

The colour of the adhesive.

## **Packaging**

Tecbond hot melt packaging adhesives are suitable for most paper- and board-based packaging materials. Formulations are available for coated, varnished and deep freeze applications. Cartons and cases closed with hot melt provide tamper-proof sealing and improve the rigidity of the packaging.



Ref	Sizes (mm)	Uses	Chemistry	Open time	Appliction temp / °C	Viscosity / cPs °C	SP / °C	HR/°C	Low temp/ °C	Colour
14	12, 15, 43	Very fast setting, high delivery rate box and carton closing adhesive (40% sustainable bio based)	EVA	Short	160-195	2000 @180 °C	113	85	0	Pale Amber
210	12	Peelable hot melt to allow packaging and labels to be easily removed. Also suitable for magazine tip ins	Rubber	Very short	195	6000 @ 180 °C	150	120	-70	Off White
214	12, 15, 43	Economical box and carton closing adhesive (40% sustainable bio based)	EVA	Short	180-195	4000 @180 °C	102	75	0	Pale Amber
244	12, 15, 43	Economical box and carton closing adhesive	EVA	Short	180-195	3750 @ 180 °C	110	85	0	Light Brown
265	43	UV varnished board and cards	Acrylic	Medium	180-195	3500 @ 180 °C	117	60	-10	Amber
342	12, 43	Very high instant grab for Triwall and other stiff boards	EVA	Very short	195	8500 @ 180 °C	100	75	10	White
345	12, 43	Versatile adhesion for difficult surfaces and UV varnish, suitable for deep freeze applications	PO	Very short	195	2250 @ 180 °C	116	80	-40	White
LM46	Oval, 12	Low application temperature packaging adhesive to protect fingers from burns and not damage heat sensitive materials	EVA	Medium	130-160	13000 @ 130 °C	88	80	10	White





## **Product Assembly**

Tecbond hot melt adhesives can be used for many product assembly applications, and are used extensively in automotive, electronics and furniture production. These adhesives are available with different viscosities to suit the application. Some adhesives have high and low temperature resistance, which is useful in automotive applications, whereas others have chemical resistance which helps in filter applications.



Ref	Sizes (mm)	Uses	Chemistry	Open time	Appliction temp / °C	Viscosity / cPs °C	SP/°C	HR/°C	Low temp/ °C	Colour
23	12, 15, 43	Medium viscosity, long open time, good on many plastics, ceramics and woods. Not suitable for polypropylene (PP) and polyethylene (PE)	EVA	Long	180-195	5000 @ 180 °C	88	80	0	Pale Amber
213	12, 15, 43	Economical, medium viscosity, long open time, good on many plastics, ceramics and woods. Not suitable for PP and PE	EVA	Long	180-195	6000 @ 180 °C	90	80	10	Pale Amber
232	7, 12, 15, 43	Economical, high viscosity for fabrics, lamp shades, plastics (not PP and PE). Excellent gap filling properties	EVA	Medium	180-195	10000 @ 180 °C	87	80	-30	Clear
239	12, 15	High viscosity crystal clear hot melt adhesive. Good low temperature performance	EVA	Medium	180-185	18000 @ 180 °C	84	70	-30	Clear
240	7, 12, 15, 43	Wood, paper, card, light gauge metal and many plastics (not PP and PE). Suitable for low melt and hot melt glue guns	EVA	Medium	160-195	7500 @ 180 °C	87	80	-10	Clear
242	12	Improved adhesion for wood, paper, card, light gauge metal and many plastics (not PP and PE)	EVA	Medium	180-195	14000 @ 180 °C	82	80	-10	Clear
248	12, 15, 43	Maximum adhesion for wood, paper, card, light gauge metal, glass, ceramic, tile, brick and many plastics (not PP and PE)	Acrylic	Long	160-195	7000 @ 180 °C	90	75	-10	Clear
260	12, 15, 43	Tough, flexible bonds on ceramics, plastics, woods and metals. Not suitable for PP and PE	EVA	Long	180-195	6000 @ 180 °C	90	70	0	Pale Amber
261	12, 15, 43	Tough, flexible bonds on ceramics, plastics, (including PP but not PE) woods and metals	EVA	Long	130-195	2500 @ 180 °C	85	75	0	Pale Amber
263	12	Polypropylene adhesive with excellent heat resistance and good low temperature performance	PO	Medium	190-200	10000 @ 180 °C	150	105	-20	Pale Amber
266	43	Polypropylene, polyethylene, polycarbonate, nylon, PVC (rigid) & polystyrene. High viscosity. High heat resistance	PO	Long	180-215	8000 @ 180 °C	115	95	20	Pale Amber
267	43	Polypropylene, polyethylene, polycarbonate, nylon, PVC (rigid) & polystyrene. Low viscosity	PO	Long	180-215	3000 @ 180 °C	150	80	10	Pale Amber
7713	12	Plastics (not PP and PE), light gauge metal, wood, excellent high and low temperature resistance, chemical resistance	Polyamide	Medium	160-215	5000 @ 190 °C	115	105	0	Amber and Black
7784	12, 15, 43	Plastics (not PP and PE), glass, ceramics, light gauge metal, wood. Excellent high and low temperature and chemical resistance	Polyamide	Medium	195-215	5500 @ 190 °C	135	120	-60	Amber
LM41	7, 12, 15, 43	Low melt, with highest adhesion, suitable for card, wood, ceramic, tile, glass and many plastics (not PE and PP)	PO	Medium	130-160	12000 @ 130 °C	100	85	0	Clear





## **Spray Adhesives**

Power Adhesives has pioneered the innovation of sprayable hot melt technology in the adhesives industry. The company's spraytec system dispenses hot melt glue in a unique "swirl" pattern and is designed to be kinder to people and the planet than other kinds of spray adhesive. Spraytec adhesives have been specially formulated to work in tandem with the 6300 and 7300 tec glue guns to achieve fast and even coverage with the minimum amount of effort.



Ref	Sizes (mm)	Uses	Chemistry	Open time	Appliction temp / °C	Viscosity / cPs °C	SP/°C	HR/°C	Low temp/ °C	Colour
410	43	Pallet stabilisation for sacks and cartons, EPS bonding and positioning in cartons	PO	Long	180	3500 @ 180 °C	125	85	-10	Off White
420	43	Upholstery and packaging foam assembly, UL 2395 approved for HVAC thermal insulation	PO	3 minutes	180	4500 @ 180 °C	105	85	0	Off White
425	43	Higher output, upholstery and packaging foam assembly, UL 2395 approved for HVAC thermal insulation	PO	3 minutes	180	3000 @ 180 °C	105	80	10	Dark Brown
430	43	Higher tack, better adhesion and longer open time. For use on foams, plastics, wood, and boards	PO	6 minutes	180	4000 @ 180 °C	102	90	10	Off White

## Woodworking

Power Adhesives has developed a range of hot melt adhesives and applicators suitable for working with various types of wood. Our woodworking adhesives have been rigorously tried and tested by tradesmen across the globe and are designed to replace the use of nails, pins, staples and other forms of wood fixings in all areas of woodworking and construction.



Ref	Sizes (mm)	Uses	Chemistry	Open time	Appliction temp / °C	Viscosity / cPs °C	SP/°C	HR/°C	Low temp/ °C	Colour
5	12, 43	Woodworking and carpentry adhesive with low viscosity for tighter joints	EVA	Long	180-195	1400 @ 180 °C	105	70	0	Pale Amber
23	12, 15, 43	Higher viscosity for better gap filling and use on uneven surfaces	EVA	Long	180-195	5000 @ 180 °C	88	80	0	Pale Amber
213	12, 15, 43	Economical general purpose woodworking adhesive	EVA	Long	180-195	6000 @ 180 °C	90	80	10	Pale Amber

## Construction

Designed for professional use and trade applications, Power's range of construction-grade adhesives makes production and installation jobs cleaner and more efficient. Ranging from the instant set, ultra-strong adhesives, to long working time adhesives with greater flexibility, the tecbond range of construction adhesives provide tradesmen with the ability to work faster and smarter.



Ref	Sizes (mm)	Uses	Chemistry	Open time	Appliction temp / °C	Viscosity / cPs °C	SP/°C	HR/°C	Low temp/ °C	Colour
5	12, 43	Woodworking, carpentry and plasterboard fabrication (v groove)	EVA	Long	180-195	1400 @ 180 °C	105	70	0	Pale Amber
238	12	Electricians adhesive for PVC and ABS, trunking, boxes, smoke detectors, cable attachment to brick, plasterboard, steel beams, painted surfaces	Acrylic	Long	160-195	10000 @ 180 °C	85	70	-20	Clear, Black
248	12, 15, 43	High strength construction adhesive, instant set when compressed. For wood, metal, glass, ceramic, concrete and most plastics (not PP and PE)	Acrylic	Long	160-195	7000 @ 180 °C	90	75	-10	Clear
280	12, 43	Extra long working time, high strength, bonds can be adjusted for up to 3 minutes after compression. For wood, metal, glass, ceramic and most plastics	PO	Long	160-195	3300 @ 180 °C	81	70	-20	Pale Amber





## **Electrical Adhesives**

Our range of specialist electrical adhesives provide users with the ability to bond a variety of materials, including plastics, metals, and PC boards, without the risk of damaging components. From wire staking to potting and encapsulation, the techond range covers all areas of electrical bonding applications. Many of our electrical adhesives are fire retardant and meet the UL-V0 flammability ratings.



Ref	Sizes (mm)	Uses	Chemistry	Open time	Appliction temp / °C	Viscosity / cPs °C	SP / °C	HR / °C	Low temp/ °C	Colour
238	12	Battery pack assembly, component stabilisation, wire staking	Acrylic	Long	160-195	10000 @ 180 °C	85	70	-20	Clear and Black
7718FR	12, 15	Low viscosity potting and encapsulation adhesive with UL 94 V0 fire retardancy rating	Polyamide	Short	195-215	1000 @ 190 °C	160	115	10	Amber and Black
7784	12, 15, 43	High and low temperature resistant assembly adhesive, suitable for plastics and metals (not suitable for PP and PE)	Polyamide	Medium	195-215	5500 @ 190 °C	135	120	-60	Amber
7786FR	12, 15	Bonds PVC, ABS, light gauge metals, PC board. Excellent upper and lower temperature resistance, UL 94 V0 fire retardancy rating	Polyamide	Medium	180-215	4800 @ 190 °C	155	145	-40	Black

## **Flooring Adhesives**

Our flooring adhesives are formulated to provide a fast and simple alternative to nails and tacks used for applying flooring. Cost-effective and easy to use, tackfix adhesives are less expensive than epoxies, which set to a hard finish, but don't allow for thermal expansion of the flooring. Tackfix flooring adhesives are suitable for carpet gripper, laminate flooring starter strips, thresholds, quadrants, and carpet repairs.



Ref	Sizes (mm)	Uses	Chemistry	Open time	Appliction temp / °C	Viscosity / cPs °C	SP/°C	HR/°C	Low temp/ °C	Colour
213	12, 15, 43	General purpose flooring adhesive for gripper attachment, carpet repairs	EVA	Long	180-195	6000 @ 180 °C	90	80	10	Pale Amber
248	12, 15, 43	High performance, gripper, stair nosings, quadrant, transition strips, glass and ceramic, instant set when compressed	Acrylic	Long	160-195	7000 @ 180 °C	90	75	-10	Clear
280	12, 43	High performance, longer working time, gripper, stair nosings, quadrant, transition strips, glass and ceramic. Can be adjusted after compression	PO	Long	160-195	3300 @ 180 °C	81	70	-20	Pale Amber

## **Automotive Adhesives**

Perhaps one of the most demanding areas for hot melt adhesives, as difficult substrates, combined with temperature and chemical resistance requirements make adhesive selection challenging. Tecbond hot melts have been successful in potting, encapsulation and component stabilistion in sensors and dashboards. Hot melts can also be effective for trim applications, including seat manufacture and foam crash protection attachment, and in dent removal to prevent paint damage.



Ref	Sizes (mm)	Uses	Chemistry	Open time	Appliction temp / °C	Viscosity / cPs °C	SP/°C	HR/°C	Low temp/ °C	Colour
246	12	Versatile dent pulling adhesive for paintless car dent removal (PDR) applications. High pull strength, easy to remove	EVA	Medium	160-195	12000 @ 180 °C	86	75	-10	Clear and Black
267W	15	High heat resistance, suitable for internal trim applications, bonds to many plastics and powder coated surfaces	PO	Long	180-215	4000 @ 180 °C	150	105	0	White
7785	12, 15, 43	Chemical resistant hot melt for applications where fuel and oil resistance is required (filter manufacture)	Polyamide	Medium	195-215	5500 @ 190 °C	155	135	-10	Amber





# **Arts, Crafts & Floristry**

Design, create, and decorate unique crafts and creations with the range of tecbond craft adhesives. With the ability to bond a wide variety of materials, including fabric, glass, wood, paper, card, plastics, and foam, they provide a more efficient and easier-to-use alternative to other fixing systems. Tecbond 240 is also available in a large range of bright colours and glitters to brighten up your crafts.



Ref	Sizes (mm)	Uses	Chemistry	Open time	Appliction temp / °C	Viscosity / cPs °C	SP / °C	HR / °C	Low temp/ °C	Colour
232	7, 12, 15, 43	Clear, economical, high viscosity for fabrics, floristry foam, ceramics and some plastics (not PP and PE)	EVA	Medium	180-195	10000 @ 180 °C	87	80	-30	Clear
239	12, 15	High viscosity crystal clear adhesive for arts, crafts, fabrics and floristry foam	EVA	Medium	180-185	18000 @ 180 °C	84	70	-30	Clear
240	7, 12, 15, 43	General purpose craft adhesive that can be run at both low melt and hot melt temperatures, available in many colours	EVA	Medium	160-195	7500 @ 180 °C	87	80	-10	16 colours & 5 glitters
LM42	12	General purpose low melt suitable for card, wood, ceramics, foam and fabrics	EVA	Medium	130-160	9000 @ 130 °C	85	70	-10	White
LM46	Oval, 12, 15, 43	General purpose, faster setting, low melt suitable for card, wood, ceramics, foam and fabrics	EVA	Medium	130-160	13000 @ 130 °C	88	80	10	White



