

TECHBOND MANUFACTURING SDN. BHD. (COMPANY NO. 240056-W)

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Dear Valued Customer,

7 October 2008



Paper and Packaging
Adhesives

Have you ever thought of “What is this small bead of Hotmelt made of”?

Generally, Hotmelt adhesives are formulated comprise of four materials: Polymers, tackifier, waxes and additives. Polymer is crucial in Hotmelt adhesives to determine the adhesive performance. The polymer used could be based on e.g., EVA (ethylene-vinyl-acetate copolymer), Polyolefin, PUR (Reactive-Polyurethane), Polyamide, SBS (styrene butadiene styrene) or SIS (styrene isoprene styrene).

Why Hot melt adhesives?

Hotmelt adhesives gain popularity in bonding industry due to fast setting speed, no solvent and water evaporation, thus low environmental impact. Hot melt gives instant bonding, where no drying oven is required and reduce investment.

Hotmelt adhesives been used to replace tapes, staples, clips and any other mechanical fasteners. It beautifies the outlook of packaging and makes your products look clean.

This edition will discuss further about EVA-based Hot melt adhesive.

Common Hot melt : EVA-based Hot melt

EVA copolymer perhaps is the most widely used base polymer in Hotmelt formulation. EVA copolymer is highly flexible polymer, compatible with other polymer and additives, and volatile to process. EVA copolymer is formulated to suit to various applications:

- Case and carton sealing
- Paper packaging
- Wood-working
- Book-Binding
- Paper Bags
- Appliance

EVA-based unfilled-hotmelt is an ideal adhesives for packaging industry. Unfilled-hotmelt works excellent with glue machine, particularly by automatic glue dispensing system. Comparatively, filled-hotmelt has high content of filler. Fillers charred under high temperatures which later clog the glue machine. Filled-hotmelt has poorer wetting power too.

Techbond EVA-based packaging hotmelt adhesives are based on unfilled system. Techbond unfilled-hotmelt has low viscosity to achieve good wetting to substrate, while maintaining the efficiency of the gluing machine.

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Techbond EVA-based Packaging Hotmelt

Techbond HM814 has volatile application. HM814 works well to general case and carton sealing. HM814 exhibits high hot tack and bonds well to Kraft paper and corrugated paper.

Techbond HM816 has higher bonding strength and good hot tack. HM816 is suitable for fast speed gluing process. HM816 is applied to high quality carton and case sealing where varnished substrate or pre-coated surface in place.

Techbond HM827 shows excellent performance to varnished or pre-coated surface, aluminized substrate and vinyl-surface. HM827 has high bonding strength and excellent hot tack. HM827 is designed to work on high speed gluing process. HM827 also has good stability under high heating condition.

Techbond HM815 is specially formulated for straw-attachment application. HM815 bonds well to polyethylene, varnished and pre-coated surfaces. HM815 has fast curing ability, suits to extremely fast production speed. White color of HM815 reflects "clean" look to the product packaging.

Techbond HM824 is used for can-labeling process. HM824 has very high hot-tack, ease the label pickup under fast speed. HM824 also set fast to instantly hold the label to aluminized can. HM824 has wide range of working temperature from 110°C to 180°C.

All the **Techbond HM-800 series** are formulated to low odor. Low odor prevents unpleasant working environment and reduce odor-sensitivity of workers.

Techbond HM-800 series are considered to be relatively safe to use with indirect food contact applications. This allows the adhesive to be used in food packaging industry.

Comparison of Techbond EVA-based Hotmelt Adhesives

	HM 814	HM 816	HM 827	HM 815	HM 824
Softening point, °C	110.5	110	112	110	70.5
Working Temperature, °C	140°C ~ 180°C	140°C ~ 180°C	140°C ~ 180°C	150°C ~ 170°C	110°C ~ 180°C
Color	Yellow Translucent	Amber	Amber	Pure White	Yellow Translucent
Setting Speed	Fast	Fast	Fast	Fast	Very fast
Hot Tack	High	High	Very High	High	Very High
Bonding Strength	Good	Excellent	Excellent	Good	Moderate
Heat Resistance	Moderate	Good	Excellent	Excellent	Moderate
Odor	Low	Low	Low	Low	Faint

Techbond Hot melt adhesives are mainly in pellets-form. It provides fast melting ability and easy of handling and storage.

IMPORTANT

All information, whether written or verbal regarding our products, their applications and uses, is given in good faith and based upon tests made by us, results of our research work and practical experience. Although the reasonable care has been taken in the preparation of such information, we cannot be responsible for the results obtained in their use, since the conditions of use and working methods are beyond our control. We disclaim third party liability for the results obtained using our products and recommend that tests should be carried out to determine the suitability of particular product for a specific purpose before production is commenced. Otherwise the general terms of sale and delivery are valid.