



Sustainability is key consideration in hot melt adhesives market

Hot melt adhesives (HMAs) are usually 100% solid thermoplastic, mostly made from four primary components, which can be heated to create a mechanical bond. HMAs are part of a global \$60–\$70 billion adhesives and sealants market.

A market study from Smithers, *The Future of Hot Melt Adhesives to 2027*, identifies water-based adhesives as the most in-demand technology, followed by solvent based, hot melt, pressure sensitive and reactive systems. Water-based and reactive systems are showing strong growth in key end-use segments, while interest in solvent systems is falling off for environmental reasons.

Technology selection is no longer dependent solely on application needs and the required quality but is increasingly being driven by energy consumption and environmental footprint, especially in times of uncertainty around food and energy availability.

According to the data from Smithers, the hot melt adhesives market is worth \$8,210 million in 2022, growing to \$9,446 million in 2027. Hot melt adhesives together with reactive and other systems will see some over proportional growth towards 15% market share. Solvent-based systems will lose its second place due to environmental reasons.

Exclusive data from Smithers' study *The Future of Hot Melt Adhesives to 2027* show that in 2022 Europe consumed a projected 565,000 tonnes of hot melt adhesives. This places the region second in the world, behind Asia. Total consumption worldwide is forecast to reach 2.77 million tonnes in 2027.

Its analysis also sub-divides the market by core end-use sectors. The three most important for hot melt consumption are:

- Packaging (29.4% market share in 2021)
- Construction/wood (17.5%)
- Nonwoven/hygiene goods (16.8%).

Packaging represents the biggest application area for hot melt adhesives. Contributing factors in the growth in packaging include e-commerce and an increase in single-person households, resulting in smaller single packs. The tapes and labels sector is closely linked to the packaging industry and for this reason is expected to grow from 175,000 tonnes to 215,000 tonnes in 2027

Recyclability is a key consideration. Many brand owners are trialling replacing existing plastic packaging formats with paperboard alternatives bonded with hot melts. This is

not suitable for all segments, but it is a noticeable trend for ambient and less sensitive foods, such as confectionary or savoury snacks.

The wider focus on sustainability is placing a premium on bio-based materials in hot melts, and within fossil-based raw materials on using more solvent-free formulations, where feasible. Biodegradable and mono-component adhesives are increasingly popular as a means to optimise the rate of recovery for paper fibres at end-of-life.

There are also other benefits hot melts can have in packaging, including for low temperature formulations – which are also economically advantageous given recent energy price rises. Better performing hot melts which use a smaller volume of adhesive to form an efficient bond can also aid converters looking to cut their carbon footprint. This can be enhanced with more precise adhesive application equipment, such as hot melt stitching platforms.

Nonwoven/hygiene applications will become the second biggest market for hot melt adhesives, taking over for construction/wood and furniture, and is expected to grow from 379,000 tonnes in 2021 towards 474,000 tonnes in 2027. Construction/wood and furniture is still expected to grow from \$1.3 billion sales with about 360,000 tonnes in 2021 towards \$1.5 billion with 402,000 tonnes in 2027.

The transportation industry and especially the automotive industry is at the beginning of its deepest transformation since its rise. Electrification, digitalization and decarbonization require massive investments and attention. The transportation sector will gain importance for hot melt adhesives and is expected to grow from 240,000 tonnes in 2021 to 305,000 tonnes in 2027.

The Future of Hot Melt Adhesives to 2027 is available to purchase now from Smithers.

For more information visit: <https://www.smithers.com/en-gb/services/market-reports/materials/the-future-of-hot-melt-adhesives-to-2027>

