



Affinity GP

POLYOLEFIN ELASTOMER

AFFINITY™ GP – a new family of high performing polymers for general purpose Hot Melt Adhesives



Dow innovates to meet today's and tomorrow's HMA market needs

Dow is committed to supplying the HMA industry with high performing polymers that deliver an optimal combination of performance and affordability, and innovates continuously to deliver benefits to the entire value chain by addressing the evolving needs of the HMA industry. Dow's Polyolefin Elastomers (POEs) create a sustainable difference across diverse markets ranging from packaging, hygiene disposables and labels to bookbinding and woodworking applications.

A new family of high performing polymers for general purpose HMA

Dow is the world's largest producer of POEs with manufacturing assets on three continents. AFFINITY™ GA has been the industry standard for almost 20 years, enabling highest performance hot melt adhesive solutions. Dow has not only built a strong industry track record on supply and product quality excellence, but has also demonstrated its commitment to the future by significantly investing in R&D and manufacturing capacity.

By listening to the needs of the industry and building on the success of AFFINITY™ GA, Dow has introduced a new product family: AFFINITY™ GP. This family offers HMA formulators the ability to design cost effective adhesive solutions that deliver high performance for general purpose applications.

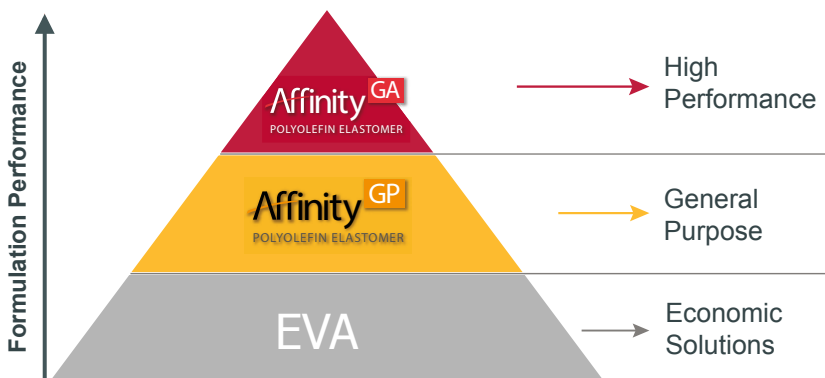
With AFFINITY™ GP, the entire HMA value chain will continue to experience the known benefits of AFFINITY™ GA in terms of processing and mileage. Ultimately, adhesives based on AFFINITY™ GP offer a true alternative to existing Ethylene Vinyl Acetate (EVA) based hot melt adhesives.

Key AFFINITY™ GP benefits:

- **Ease of manufacturing:** AFFINITY™ GP enables formulation freedom as it is compatible with a range of tackifiers and waxes. AFFINITY™ GP runs efficiently on existing processing equipment as well as on high speed application lines thanks to its fast set time.
- **Cost-effectiveness:** thanks to a lower melt density, AFFINITY™ GP offers higher mileage over typical EVA solutions.
- **Improved performance:** the oxidative stability of AFFINITY™ GP enables a stable melt rheology, reducing the risk of transfer-line fouling.
- **Lower overall costs:** the high adhesive mileage and improved processability for ease of maintenance and downtime can generate efficiencies that contribute to lower system costs.
- **Enhanced workplace conditions:** HMAs formulated with AFFINITY™ GP offer clean-running systems with virtually no smoke or odor during the production process.
- **Compliant with stringent food contact materials regulations* across the globe:**
 - Europe Commission Regulation (EU) No 10/2011 – Composition in compliance
 - US FDA 21CFR175.105: Adhesives
 - US FDA 21 CFR 177.1210: Closures with sealing gaskets for food containers
 - China Food Contact Use Resin and FCM additives (GB9685) compliant

*Please contact Dow for Regulatory Compliance Information

Hot Melt Adhesive Market & Needs



Today's fast paced lifestyles have radically changed the way we consume. We are living longer and the growing urbanization and our enhanced purchasing power are driving the need for more convenient packaging as well as products that offer enhanced wear and comfort. This has in turn boosted global demand for hot melt adhesives and formulators are challenged to meet those demands.

Presenting AFFINITY™ GP 1570 - a member of the AFFINITY™ GP family

Designed for general purpose applications, Dow's new AFFINITY™ GP 1570 ethylene-based copolymer brings to the market an innovative alternative to incumbent EVA copolymers. This next generation polymer gives formulators cost effective access to the benefits of AFFINITY™ GA.

AFFINITY™ GP 1570 extends formulators' choice and opens up further possibilities, hence enabling formulators to create precisely tailored formulations that bring improved performance and extend the applications scope versus incumbent EVA solutions.

Key physical properties of AFFINITY™ GP 1570	
Property	Value
Viscosity @177°C	12,500 mPa.s
Density @23°C	0.890 g/cm ³

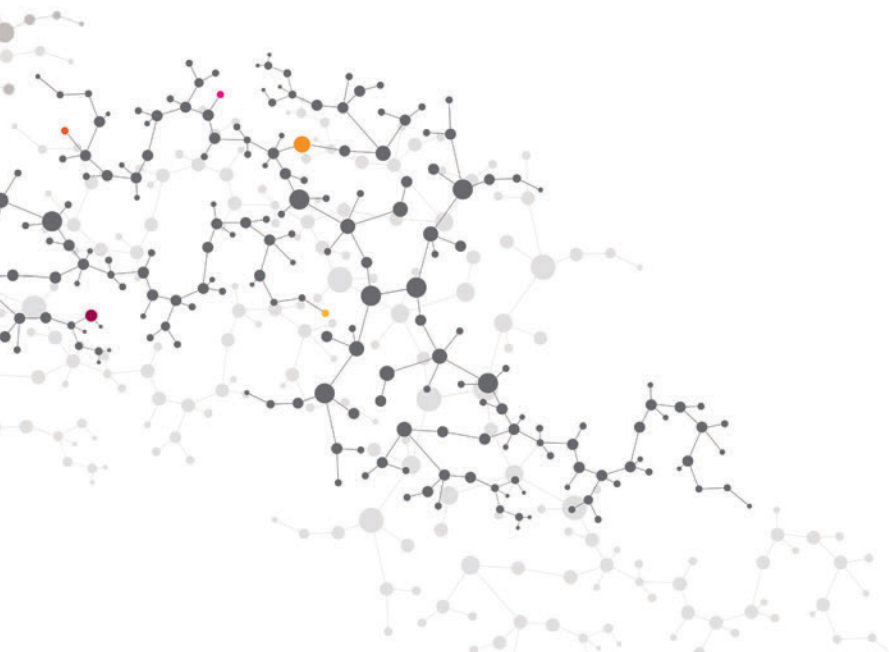
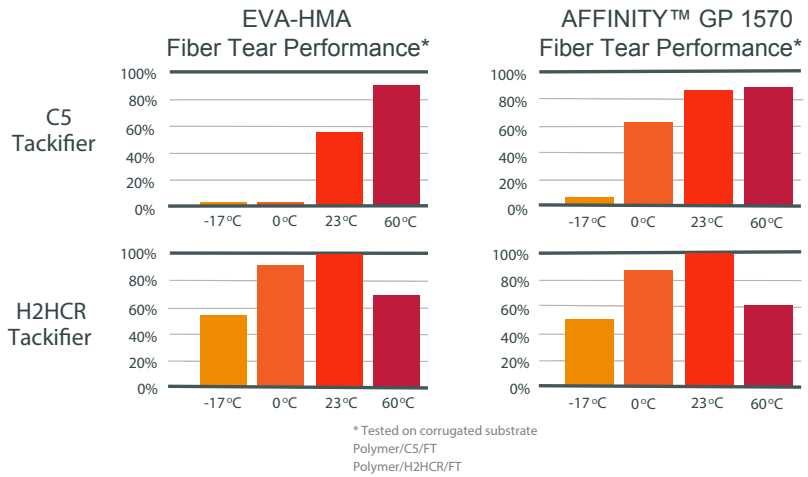
A winning combination: AFFINITY™ GP 1570 offers critical benefits over EVA

	AFFINITY™ GP	EVA
Mileage	••••	•••
Fibre Tear Performance	••••	•••
Thermo-Stability	•••••	•••
Processability	•••••	•••
Total System Cost	•••••	•••
Fast Processing Speed	•••••	•••••
Low Odor	•••••	•••

AFFINITY™ GP 1570 offers a range of processing benefits:

- No or minimal stringing
- Virtually char- and odor-free
- Resistant to extreme heat and cold
- Excellent thermal stability

AFFINITY™ GP 1570 can be deployed with a range of tackifiers



About Dow.

Dow is the world's largest producer of polyolefin elastomers with more than 40 years of industry experience and expertise. With our broad product portfolio, and as the only producer with world-scale trains on three continents, we can work together to discuss your specific challenges and how we can help you meet the needs of the rapidly evolving adhesives industry. Discover today how Dow is focused on sticking to innovation by visiting: www.DowElastomers.com

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