



Dow Packaging and Specialty Plastics

Realize Your Packaging Potential

AFFINITY™ Polyolefin Plastomer Sealants

Sealants Solutions from Dow

Dow's sealants portfolio offers you an extensive line of resin solutions. Dow Sealants are designed to suit a broad range of sealing requirements and different production processes while providing a versatile choice to meet today's packaging needs.

When you need a resin to help your applications flow faster, stick better, breathe better, and more, you need AFFINITY™ Polyolefin Plastomer Sealants (POPs). AFFINITY™ POPs combine high flow with low crystallinity, allowing you to achieve improved performance, processing and value in flexible packaging applications.

AFFINITY™ POPs were among the first polymers created using INSITE™ technology, Dow's approach to linking the science of catalyst, process and materials together to address customer needs. For AFFINITY™ POPs, this translates to performance improvements that can enhance product protection and shelf-life, reduce package failures, allow downgauging, and help you compete in new and existing applications.

The remarkable versatility of AFFINITY™ polymers opens doors to packaging opportunities and cost-performance options in multi-layer bags and pouches, shrink films, molded goods, heavy-duty bags and sacks and other applications that require both thermoplastic and elastic properties. To compete successfully in an ever-changing and evermore competitive business environment, your packages have to perform. Your customers demand it, and AFFINITY™ POPs from Dow may help you exceed your customers' expectations.

Affinity
polyolefin plastomers



Overall Value of AFFINITY™ Polyolefin Plastomer Sealants

Performance	Benefits
Superior sealability <ul style="list-style-type: none"> • High hot tack and heat seal strength • Low heat seal initiation temperature 	Package integrity and faster filling speeds
Excellent optics	Consumer appeal
Very good toughness	Package integrity and downgauging savings
Good processability	Can run on standard PE extrusion lines
Cost efficiency	Lower cost than ionomers

Technical Zone

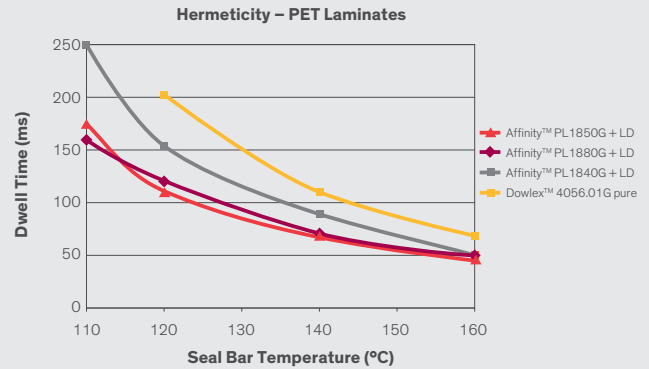
AFFINITY™ Polyolefin Plastomer Sealants provide enhanced performance via low temperature and homogeneous melting behavior to enable fast sealing, including in seal areas where product contamination is present. They can be used pure, or in blends, to deliver improved pack hermeticity at the highest line speeds.

Enhanced Packaging Line Speeds

The fast melting behavior and excellent flow of AFFINITY™ Polyolefin Plastomer Sealants means that at typical seal bar temperatures, only a relatively low dwell time is required to create a hermetic seal. This translates into the ability to run the packaging operation significantly faster, without running into leaker problems. This behavior also delivers optimum results where complex geometries and gusset areas can otherwise lead to channel leakers in the seal.

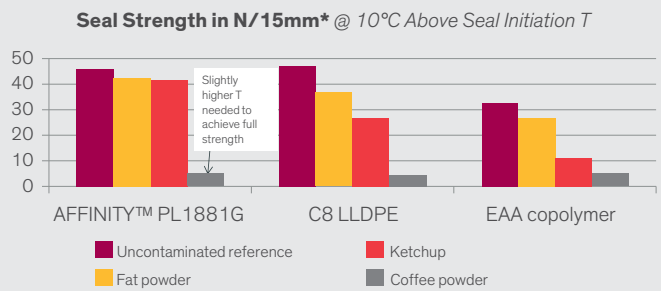
Sealing Through Product Contamination

The early melting behavior of AFFINITY™ resins also means more time for contamination to be squeezed out of the seal area during the pressurization. The contamination which cannot be removed can be very well encapsulated, particularly when employing an AFFINITY™ grade of higher flow, leading to excellent performance with a whole variety of different potential contaminants.



PET12//PE/PE/sealant structures

Source: Dow



PET12//sealant structures

The properties shown are typical and not to be construed as specifications.

Source: Dow

Key AFFINITY™ Polyolefin Plastomer Sealants

Sealant	MI, g/10 ⁵	Density, g/cc	Process	Value	S/AB version
AFFINITY™ PL 1880G	1	.902	Blown	Market reference for high performance sealant: remarkable combination of optics-mechanics and packaging speed.	AFFINITY™ PL 1881G
AFFINITY™ PL 1840G	1	.909	Blown	Alternative to AFFINITY™ PL 1880G for improved stiffness.	
AFFINITY™ PF 1140G	1.6	.897	Blown	Enhanced sealing in complex geometries, fin seals and wrinkles.	
AFFINITY™ PL 1850G	3	.902	Cast and Blown	Alternative to AFFINITY™ PL 1880G in cast applications. Suitable for blown applications where higher caulkability is required.	
AFFINITY™ PL 1280G	6	.900	Film and Coating	High flow resin with outstanding sealability and seal through contamination performance.	AFFINITY™ PL 1281G
AFFINITY™ HT 1285G	6	.900	Film and Coating	Alternative to AFFINITY™ PL 1280G with improved hot-tack and caulkability.	

Contact a Dow representative today to learn more.

For more information please visit <http://www.dow.com/packaging>

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Published September, 2015.

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Form No. EUR 768-32621-0915PN