

PE Modification, Extrusion Coating

Metal Adhesion

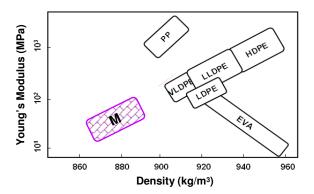
TAFMER™ M

Modified ethylene based α -olefin copolymer

TAFMERTM M is an ethylene based α -olefin copolymer grafted with polar group. It is used as a modifier of polyethylene (PE) and other thermoplastics to improve its physical properties such as impact resistance, flexibility and adhesion strength to metals.

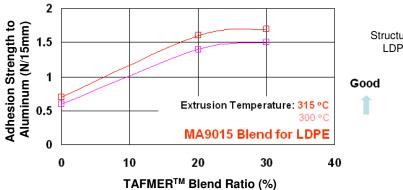
General characteristics attributed to TAFMER™ M:

- Low Density and Low Young's Modulus for Softness and Flexibility
- Low Glass Transition Temperature for Low Temperature Impact Resistance
- Grafted Polar Group for Adhesion Strength to Metals



Replacement of Ethylene Based Polar Copolymers

Polar copolymers such as EMMA are usually used as PE modifier to improve adhesion strength to aluminum layer. Polar polymer, such as EMMA have peculiar odor inherent to polar group in the polymer. TAFMERTM M, in comparison, is less likely to cause such the odor problem and it can improve adhesion strength between PE and aluminum layer.



Structure : LDPE + MA9015 / Aluminum

LDPE: MFR(190°C)=7 g/10min, Density=917 kg/m³





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Summary

TAFMER™ M

☑ Enables PE to adhere to Aluminum

Basic Properties

Physical Properties	Test Method	Unit	MA9015
MFR(190°C/2.16kg)	ASTM D1238	g/10min	11
MFR(230°C/2.16kg)	ASTM D1238	g/10min	23
Density	ASTM D1505	kg/m³	896
Mechanical Properties			
Tensile Strength at Break	ASTM D638	MPa	16
Elongation at Break	ASTM D638	%	850
Surface Hardness (Shore A)	ASTM D2240	=	89
Thermal Properties			
Brittleness Temperature	ASTM D746	°C	< -70

Note: All of the above listed data are representative values, and not specific ones.

EU Directive

All the monomers and additives used in the above TAFMER™ grade are listed in the EU Directive 2002/72/EC and its amendment 2008/39/EC.

The only additives with Specific Migration Limit (SML) are:

n-Octadecyl 3,5-di-t-butyl-4-hydroxy hydrocinnamate (CAS No.2082-79-3, Ref No.68320)

SML= 6mg/kg

Please ensure that the SML and Overall Migration (OM) are within the specified value in the end-use products,.

Disclaimer:

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