

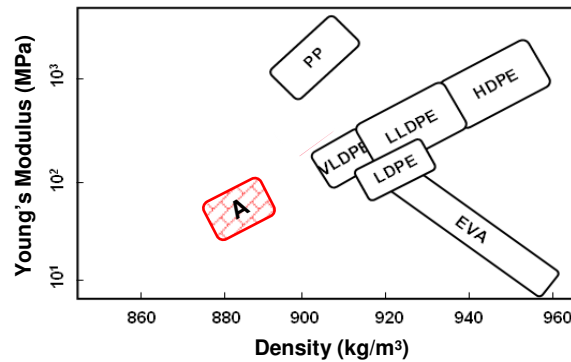
TAFMER™ A

Ethylene based α -olefin copolymer

TAFMER™ A is compatible with polypropylene (PP). It is used as a modifier to improve properties such as impact resistance, Heat Seal Initiation Temperature (HSIT) and flexibility.

General characteristics attributed to TAFMER™ A :

- Low Young's Modulus for Softness and Flexibility
- Low Glass Transition Temperature for Low Temperature Impact strength
- Miscible with PE and Compatible to PP for Adhesion Strength Control



Typical Application

CPP Sealant for Retort Pouch

e.g.

O-PET or O-PA // DL // CPP
DL : Dry Lamination

TAFMER™A can be added to sealant layer as follows.

Purpose

Adhesion Strength Control

CPP = b-PP + LDPE + TAFMER™ A

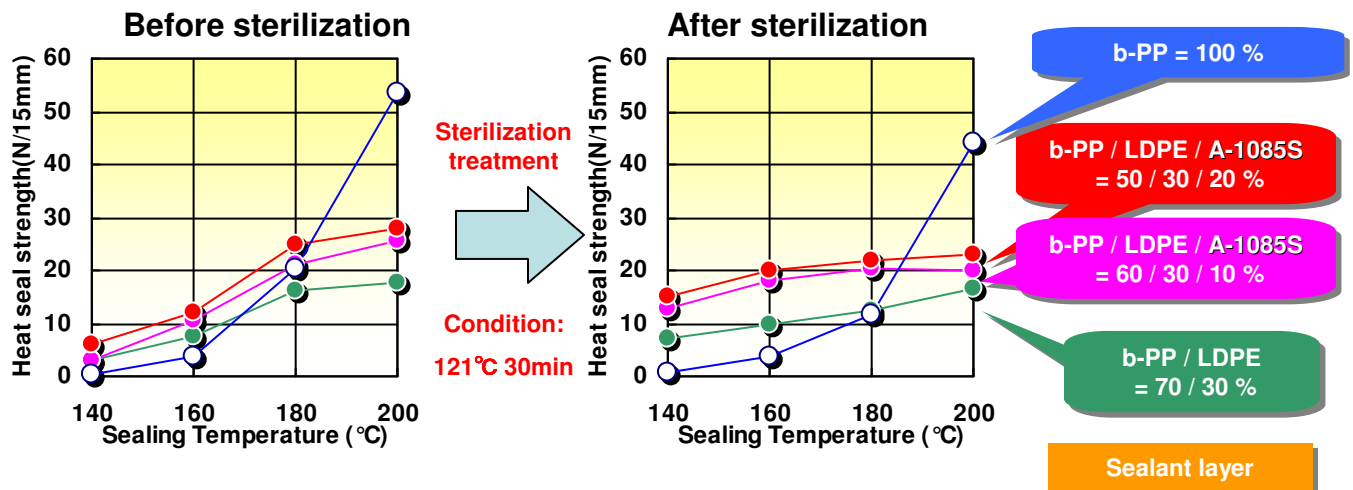
b-PP : PP impact copolymer

Heat seal Strength

With the addition of TAFMER™A and LDPE in PP, the following can be achieved:

- ☑ Enables to control heat seal strength of PP for Easy Peel

By varying LDPE and TAFMER™ A content, adhesion strength to PP can be controlled. Heat seal strength is not drastically affected by sterilization.



Structure:
Sealant (20 μ m) / Substrate (b-PP 50 μ m) // DL // PET(24 μ m)
b-PP : PP impact copolymer
DL: Dry Lamination

Sealant:
b-PP + LDPE + TAFMER™ A-1085S
b-PP MFR(230 °C)= 3.5 g/10min
LDPE MFR(190 °C)= 2 g/10min

Sealing condition:
Seal to PP sheet (h-PP, 350 μ m)
Sealing temperature : 180 °C
Pressure : 0.2 MPa, Time : 1 s

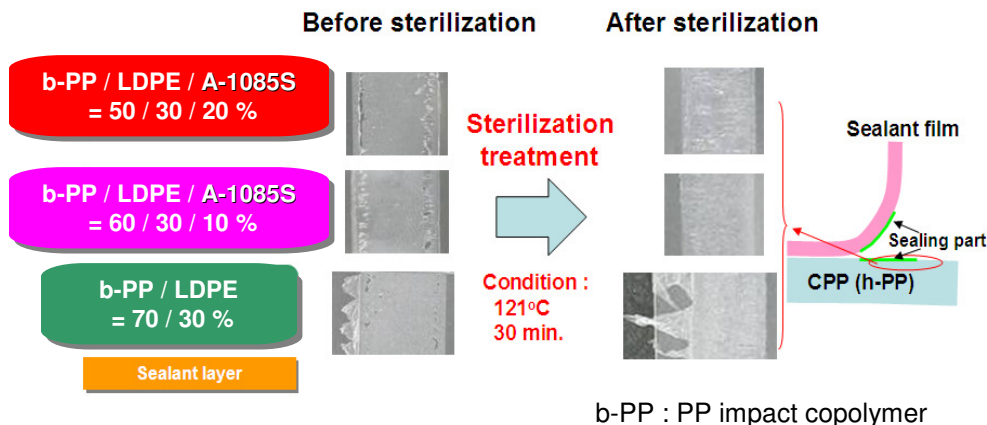
Casting condition:
Resin temperature : 240 °C

Better Peel Appearance

A common problem faced after sterilization is bad peel appearance.

TAFMER™ A can be added for the following:

- ☑ Good peel appearance of sealed area; No angel hair
- ☑ Evenly distributed peel strength throughout sealed area



Structure : Sealant (20 μ m) / Substrate (b-PP 50 μ m)
 Sealant : b-PP + LDPE + TAFMER™ A-1085S
 b-PP MFR(230 °C)= 3.5 g/10min
 LDPE: MFR(190 °C)= 2 g/10min
 Casting condition: Resin temperature : 240 °C, Line speed : 10m/min
 Sealing condition : Seal to CPP (h-PP, 350 μ m)
 Sealing temperature : 180 °C
 Pressure : 0.2 MPa, Time : 1 s

Summary

TAFMER™ A

- ☑ Enables adhesion strength control
- ☑ Improves peel appearance

Basic Properties

Physical Properties	Test Method	Unit	A-1085S	A-4085S
MFR(190°C/2.16kg)	ASTM D1238	g/10min	1.2	3.6
MFR(230°C/2.16kg)	ASTM D1238	g/10min	2.2	6.7
Density	ASTM D1505	kg/m ³	885	885
Mechanical Properties				
Tensile Strength at Break	ASTM D638	MPa	> 37	> 27
Elongation at Break	ASTM D638	%	> 1000	> 1000
Torsional Rigidity	ASTM D1043	MPa	9	9
Surface Hardness (Shore A)	ASTM D2240	—	87	86
Thermal Properties				
Melting Point	MCI Method	°C	66	66
Brittleness Temperature	ASTM D746	°C	< -70	< -70

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

FDA

All the monomers and additives used in the above TAFMER™ grade are listed in the “Code of Federal Regulation, title 21 Food and Drugs, Parts 170 to 189” and “FCN (Food Contact Notification)”.

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.

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