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.

![Graph showing heat seal strength before and after sterilization](image)

**Structure:**
Sealant (20 μm) / Substrate (b-PP 50 μm) // DL // PET(24 μm)

- 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 μm)
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

**Summary**

TAFMER™ A
- Enables adhesion strength control
- Improves peel appearance
Basic Properties

<table>
<thead>
<tr>
<th>Physical Properties</th>
<th>Test Method</th>
<th>Unit</th>
<th>A-1085S</th>
<th>A-4085S</th>
</tr>
</thead>
<tbody>
<tr>
<td>MFR(190°C/2.16kg)</td>
<td>ASTM D1238</td>
<td>g/10min</td>
<td>1.2</td>
<td>3.6</td>
</tr>
<tr>
<td>MFR(230°C/2.16kg)</td>
<td>ASTM D1238</td>
<td>g/10min</td>
<td>2.2</td>
<td>6.7</td>
</tr>
<tr>
<td>Density</td>
<td>ASTM D1505</td>
<td>kg/m³</td>
<td>885</td>
<td>885</td>
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</tbody>
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<table>
<thead>
<tr>
<th>Mechanical Properties</th>
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<tr>
<td>Tensile Strength at Break</td>
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<tr>
<td>Elongation at Break</td>
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<tr>
<td>Torsional Rigidity</td>
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<td>Surface Hardness (Shore A)</td>
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<thead>
<tr>
<th>Thermal Properties</th>
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<tbody>
<tr>
<td>Melting Point</td>
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<td>Britteness Temperature</td>
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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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