

- Recyclability**
 - All-PE structure with excellent packaging performance
- Appearance**
 - Excellent gloss, transparency, and haptics
 - Matte surface option available
 - Printability
 - Touch and feel close to current PET lamination structure
- Abuse resistance**
 - Superior film toughness
 - Can pass stringent drop tests*
 - Packaging integrity and reduced waste
- Packaging efficiency**
 - Dow innovative asymmetric technology

Excellent shelf appearance and toughness in an all-PE pillow pouch for FFS lines

Heat seal temperature windows represent a well-known challenge for all-PE packaging. How to get strong seal strength, no shrinkage on the surface, and achieve high packing speed on modern FFS lines – all at the same time?

By using Dow's innovative asymmetric sealing technology, INNATE™ TF resin-produced BOPE film laminated with blown PE film (60-80µm) can meet the sealing window challenge. This success has enabled us to replace traditional PET//PE, BOPA//PE, BOPP//PE laminations in detergent powder, frozen food, and snack food pillow pouch applications.

INNATE™ TF Polyethylene Resins for Tenter Frame Biaxial

Orientation (1.7g/10 min MI; 0.926 g/cm³ density) feature a unique molecular architecture that offers a wealth of benefits, including recyclability.

In this application, the resins provide sound packaging integrity with toughness and leak resistance, together with stiffness for FFS lines. Excellent printability and a choice of high-gloss or distinctive matte looks provide options for compelling shelf appeal. And as a recyclable, all-PE solution, they promote the sustainability desired throughout the marketplace.

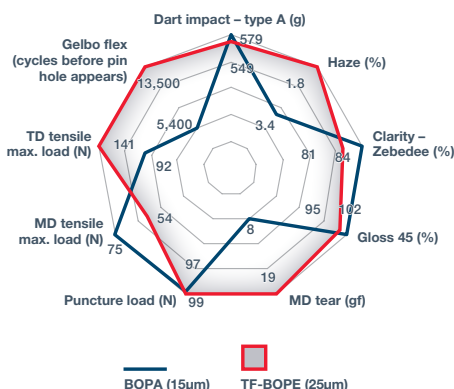
We call INNATE™ TF resins *The Future of sustainable packaging.* Why? Compared to traditional PE products, films made with INNATE™ TF resins:

- Achieve up to 80% less haze
- Have 2x the impact strength and tensile modulus
- Offer 3x the puncture resistance and tensile strength
- Allow dazzling optics for printing
- Are low-temperature resistant

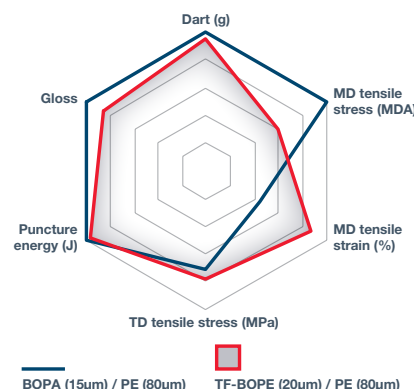
Let's talk about the future of your applications with INNATE™ TF resins.



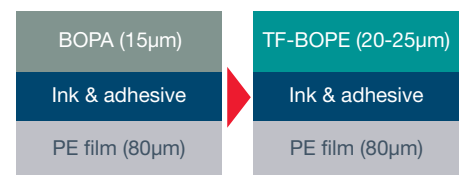
Film properties comparison



Lamination properties comparison



Structure



Innate TF
polyethylene resins for tenter frame biaxial orientation by

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*Bag drop testing protocol: single bag repeated dropping (drop from 1.5m height, pouch bottom landed for 3 times, and pouch top landed for 3 times)

North America	+ 800-258-2436	Europe, Africa	+ 00800-369-4636-7	dow.com
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