

## Eastman Embrace™ family of resins

Shrink film and labels for packaging

# Sustainable innovation through packaging

- Eastman Embrace™ LV or Embrace™ HY combined with Embrace LV both offer a low shrink force, making it possible for lightweighting of bottles.
- There is no machine direction (MD) shrinkage when using Embrace LV, reducing film use, raw material, and waste.
- Even if a full-body shrink label is not completely removed from a PET bottle, the bottle can still be recycled in a “mixed plastic” stream. The recycled material can be used in applications not requiring pure recycled PET.
- No glue is necessary to adhere the label to the bottle, enabling clean removal of the label from the bottle.
- By using Embrace, brand owners have the potential to eliminate secondary packaging such as tamper-evident bands and plastic rings.
- Embrace labels allow brands to incorporate less than perfect postconsumer recycled content in their bottles while maintaining their brand image.
- Embrace labels can help provide stability for ultra lightweighted bottles.
- With Embrace HY, shrink labels can be made with up to 8% renewable content.<sup>1</sup>

### Did you know . . .

That the machine direction growth of Eastman Embrace™ LV copolyester makes it possible to use up to 5% less film to make the same number of labels as standard PETG? That's like getting 1 label free for every 20 produced!

<sup>1</sup>Based on extruders adding 25% Embrace HY additive; actual percentage may vary according to extruder formulation.



# Reduction in material, energy, and waste

## Eastman Embrace™ LV copolyester offers no machine direction shrinkage

- Instead of shrinking in the MD, Embrace LV actually grows!
- MD growth means less film usage, reducing raw materials and waste.
- Embrace LV has the potential to reduce material consumption in a shrink label by using 5% less film! This translates to 1 free label per 20 produced.

## Low shrink force

- The low shrink force of Embrace LV or Embrace HY combined with Embrace LV both enable bottle downgauging.
- Embrace LV or Embrace HY combined with Embrace LV both have up to a 40%–50% lower shrink force than other polyester shrink films.

## Eastman Embrace™ HY copolyester offers more film/pound resin

- With Embrace HY, more MSI (1,000 square inches) or SQM (square meters) film is possible per weight of resin.
- Embrace HY has approximately 30% lower density than other copolyesters.
- More film per pound means less material used for same demand.

## Eliminates secondary packaging

- Shrink films offer a 360° billboard effect on the primary package.
- Potential to eliminate secondary packaging such as tamper-evident bands and plastic rings.

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