

Mechanically Recycled PE for Blow Molding

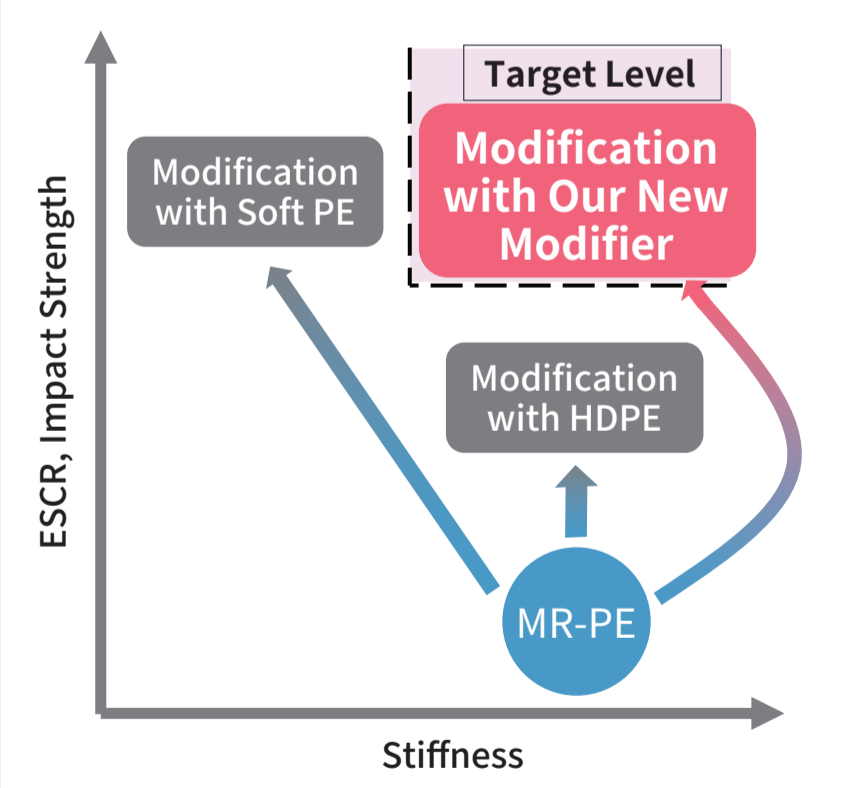
Stage	Concept	Developing	Developed	Launched
Keyword	Mechanical Recycling	Reusable Design	Circular Economy	

Use Blow Molding / Container (Detergent Container)

Background

- Since Mechanically Recycled PE (MR-PE) has lower ESCR or impact strength than virgin PE, it is not widely applied for the detergent bottles.
- Our new modifier is now under development to enhance those physical properties of MR-PE without losing stiffness in small quantities.

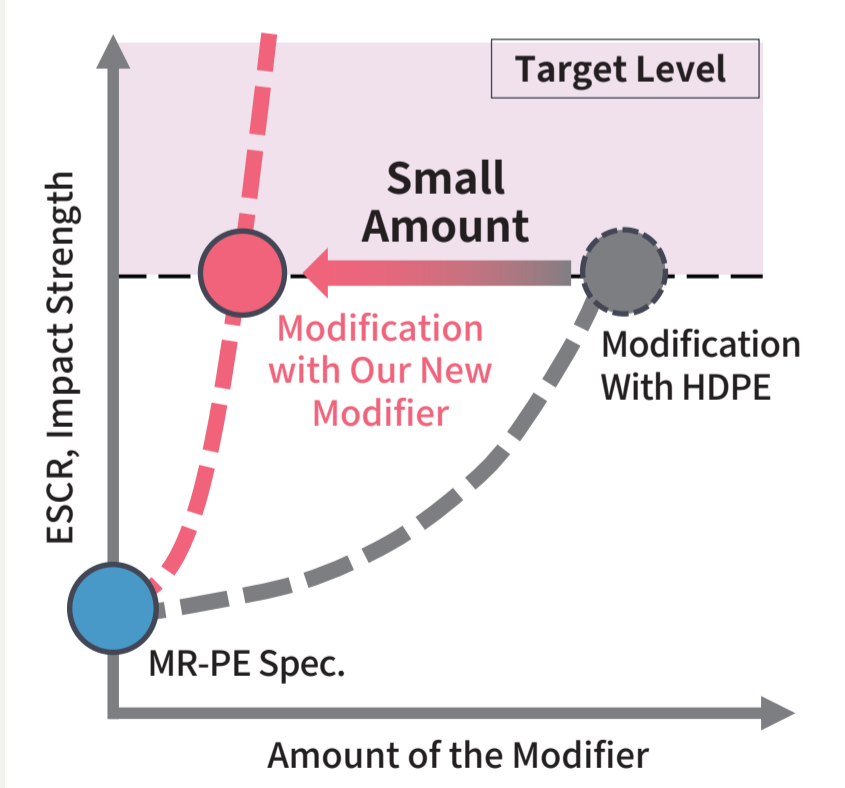
What modifier is suitable to make the mechanically recycled PE usable for the detergent bottles?



Comparison with the Modifiers

- Soft PE: × (Stiffness)
- HDPE: × (ESCR, Impact Strength)
- Our New Modifier: ◎

How much amount of the modifier is necessary for the enough modification?



Required Amount for the Modification

- HDPE: More than 50%
- Our New Modifier: 10-30%