

Stage

R&D

Introduction consideration

Practical stage

Keyword

Mechanical
Recycling

Reusable Design

Use

Stationery / Cosmetic Bottle / Daily Necessities etc.

Challenge

- To meet corporate sustainability targets and regulatory requirements such as PPWR, recycled PP is increasingly required while maintaining product quality, including physical properties, appearance, and safety.

Solution

- PCR-containing compounds with a natural appearance and performance close to virgin materials.
- Compatible with a wide range of processing methods, including extrusion, injection molding, and blow molding.

GRADE		For Injection Molding			For Injection Blow	For Sheet	
		General	Transparency	High MR content		General	High MR content
		RG002	RG007	RG003	RG004	RG006	RG005
MR ratio	wt%	30	30	60	30	30	60
MFR	g/10min	25	25	12	7	1.5	3.5
Flexural Modulus	MPa	1,500	1,400	1,400	1,050	1,150	1,350
Charpy@23°C	kJ/m ²	3.5	4.0	5.0	5.0	10	4.5
HAZE (t=2mm)	%	60	25	50	-	-	-

Benefit

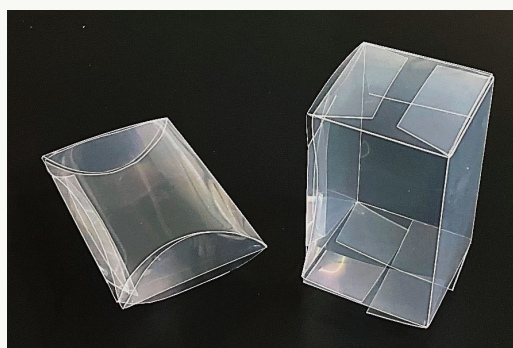
- The use of PCR-based materials can contribute to reducing life-cycle CO₂ emissions. (Based on internal estimates, a grade containing 50% PCR can reduce CO₂ emissions by approximately 30% compared with virgin PP.)
- The material is compatible with a wide range of processing methods, including extrusion, injection molding, and blow molding.
- Flexible color design is possible through the addition of pigment masterbatches.
- Grades can be selected to meet the requirements of a wide variety of applications.



Injection Molding



Injection Blow



Sheet



Contact |  Japan Polypropylene Corporation

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