

PARTNER HIGHLIGHT



Samyang Kasei, established in 1989, is the first polycarbonate producer in Korea and has an annual production capacity of 120,000 tons and is striving to improve its corporate value through price, quality and competitiveness.



Polycarbonate (PC) polymerization unit



Global HQ: Seoul, South Korea



TRIREX® polycarbonate resins offer superior transparency, mechanical properties, good dimensional stability and high electrical performance, which allows it to be widely used for electrical, electronic, appliance, automotive and optical industries.

Product Line-Up

TRIREX® PC, PC Compound, **Si-PC**, Si-PC Compound, HT-PC
TRILOY® Alloy compounds PC/ABS, PC/PBT, PC/PET, PC/PCTG

TRIREX 30 Viscosity 22 Development Order or User Name IR (03)

TRIREX® IR GRADE

Injection molding for general purpose uses Good releasing
Office equipment, Food container, etc.

- 3017IR - High flow
- 3022IR - Low viscosity
- 3022IR (02) - Blue tinted color
- 3022IR (HD) / 3025IR (03) - Water White color

TRIREX® U GRADE

Specialty suitable for weathering resistance. (UV stabilized)

- 3025U (H), 3027U (H)
- Extrusion Grade/ - Solid Sheet
- 3027U (H2)
- 3027U (M1), 3027U (M3)
- Multiwall or Corrugated Sheet
- 3022U / 3020U / 3025U / 3027U / 3030U
- General U-Grade
- Lamp cover, Outdoor infrastructure, etc.



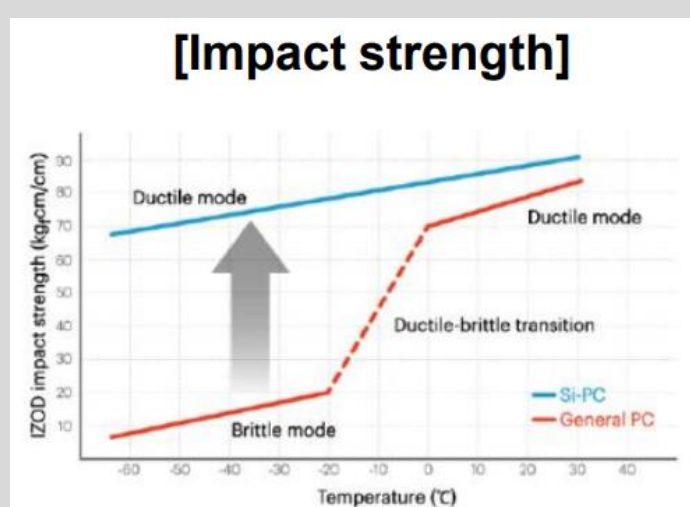
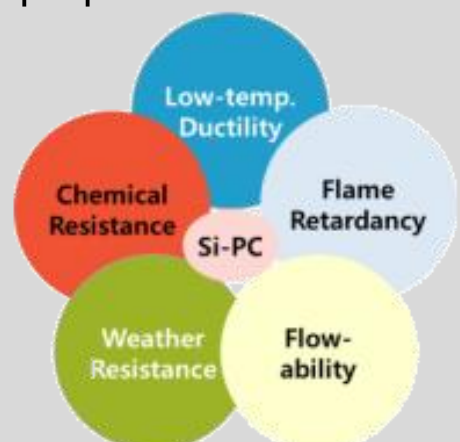
<p>IR Grade</p> <ul style="list-style-type: none"> Grade Added To the Colorant and Hetero-Material U Grade Utilized for Food container 	<p>U Grade</p> <ul style="list-style-type: none"> Grade Added to UV Stabilizer L1 Grade Used for the Cover of Electronic Lamps and Sheet
<p>A Grade</p> <ul style="list-style-type: none"> Grade Pelletizing the Base Granule I Grade for the Use of Compounding 	<p>B Grade</p> <ul style="list-style-type: none"> A Grade Used off the Bottle
<p>L1 Grade</p> <ul style="list-style-type: none"> A Grade Used for the H/Lamp and Lens 	<p>I Grade</p> <ul style="list-style-type: none"> Grade Added to Only the Colorant

*PC General grade section •A: Heat stabilizers •R: Heat stabilizers + separating materials •iR: Heat stabilizers + separating materials + stain •Hf: High flow •U: UV stable grade •L1: Lens grade



TRIREX S (Si-PC Polycarbonate-Polysiloxane Copolymer)

Si-PC have low-temp. ductility up to -60°C with fair transparency, high-impact, flame-resistance, and chemical resistance properties

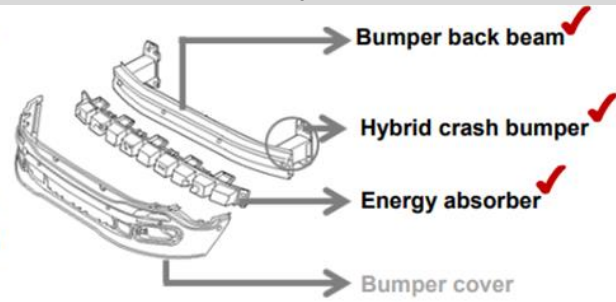


Automotive		E&E			
Transparent		Others			

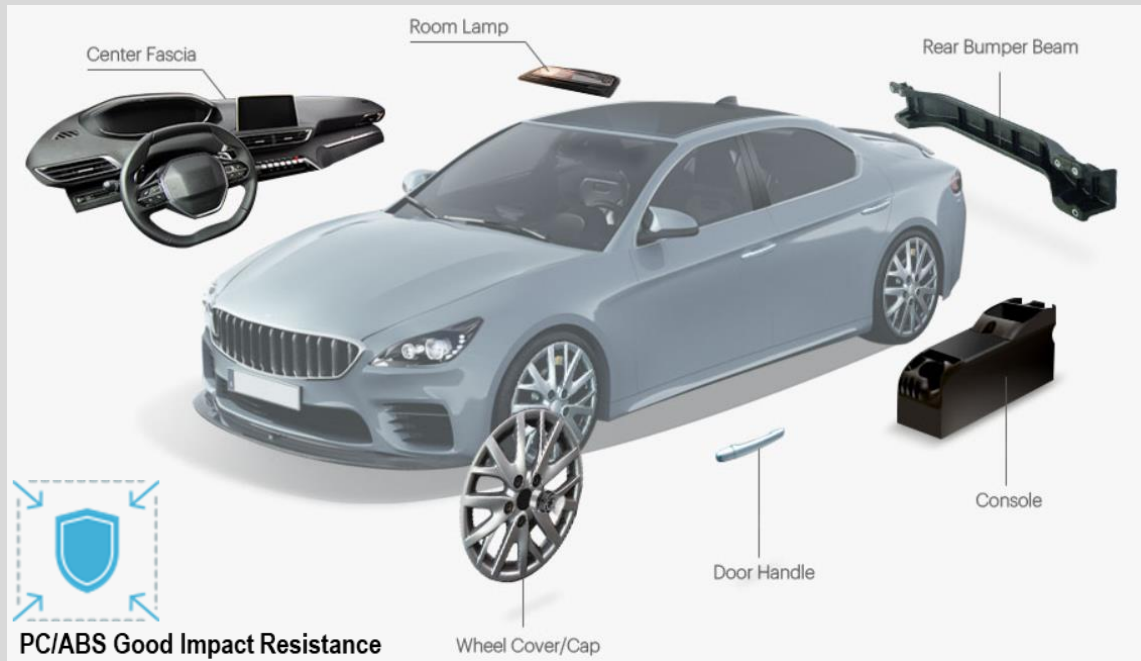
TRILOY® Alloy compounds PC/ABS, PC/PBT, PC/PET, PC/PCTG

TRILOY is the PC based compound resin, designed to meet customer's challenging application requirements. TRILOY has good impact resistance, heat resistance, and excellent processability, which makes it suitable for precision parts.

High Impact Energy Absorb PC/PBT is an impact energy absorption maximized material. It efficiently disperses the external shock with dual size rubber. Also, it meets with new safety regulations which are able to be used for bumper.



PC/PBT, PC/PET: Superior chemical resistance



PC/ABS Good Impact Resistance



PC/ASA Excellent Weather Resistance

TRILOY

	grade	HDT
Normal grade	200	~ 70
High impact	210	~ 80
High heat / impact	215	~ 90
High heat / low temp. impact	220	~100
Extra high heat	230	~110
Chrome plating	200PG	~ 70
	210PG	~ 85
	215PG	~ 95
Chemical resistance	250	~ 95
	251	~100

Case Study

Medical polycarbonate materials



With the development of medical technology, life expectancy is increasing, and as the aging population increases, the demand for medical devices and medical supplies is also increasing. Medical polymer materials can be classified into two broad categories depending on the field, which can be divided into the field of medical equipment and packaging materials, and the field of biomaterials. In the case of medical equipment and packaging materials, chemical and thermal treatments are performed for sterilization. Therefore, it is necessary to develop materials with excellent chemical resistance and heat stability, and in the case of products that can contact the human body or blood, human suitability certification is required.



Connector



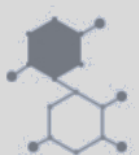
Chemical resistance



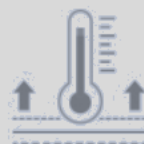
Medical device housing



3-way stopcock



Biocompatibility



Heat resistance stability



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