

# K4510ET

Polypropylene Random Copolymer (RCPP) /  
High Transparency Medical Injection Grade

**PRO-EFFICIENT** established new performance and efficiency benchmarks. **K4510ET** is non-toxic substance Random Copolymer grade comply with medical certificate for raw material feature high transparency and high productivity which dedicate to **LIFE-PRO** line.

## PRODUCT DESCRIPTION

K4510ET is a Medical Grade Polypropylene Random Copolymer (RCPP) with the characteristic of high transparency and good processability. It is designed for injection molding and injection stretch blow molding (ISBM) processing.

## INDUSTRY

- Medical Devices
- Syringes
- Baby Bottles
- IV Bottles (ISBM)

## PRODUCT FEATURE

- Medical Grade
- High Transparency
- High Gloss
- Natural Color (OB Free)
- Ethylene oxide/Autoclave Sterilization

## REGULATION COMPLIANCE

- FDA US 21 CFR 177.1520
- Commission Regulation (EU) No. 10/2011
- RoHS Directive 2011/65/EU
- REACH Regulation (EC) No. 1907/2006
- Halal Certificate
- USP Class VI
- EP 3.1.6
- DMF No. 37508

PHYSICAL PROPERTY	TEST METHOD	UNIT	VALUE
Melt Flow Rate (230°C/2.16 kg)	ASTM D1238	g/10 min	10
Density (23°C)	ASTM D792	g/cm <sup>3</sup>	0.90
Mold Shrinkage	IRPC	%	1.2 - 1.7
MECHANICAL PROPERTY			
Tensile Strength at Yield (3.2 mm, 50 mm/min)	ASTM D638	MPa	30
Elongation at Yield (3.2 mm, 50 mm/min)	ASTM D638	%	13
Flexural Modulus (1% Secant, 3.2 mm, 1.3 mm/min)	ASTM D790	MPa	1,150
Izod Notched Impact Strength (3.2 mm, 23°C)	ASTM D256	J/m	70
HARDNESS PROPERTY			
Rockwell Hardness (3.2 mm)	ASTM D785	R Scale	91
THERMAL PROPERTY *Unannealed			
Heat Distortion Temperature (3.2 mm, 0.455 MPa)	ASTM D648	°C	85
OPTICAL PROPERTY			
Haze (1 mm)	ASTM D1003	%	8

Conversion (1 MPa = 10.2 kgf/cm<sup>2</sup> | 1 J/m = 0.1 kgf-cm/cm)

Remark: The values presented above are typical laboratory, not to be construed as specifications and may vary within moderate ranges. The applicability or accuracy of this information or the suitability of our products cannot be guaranteed because users' conditions of use are beyond our control.