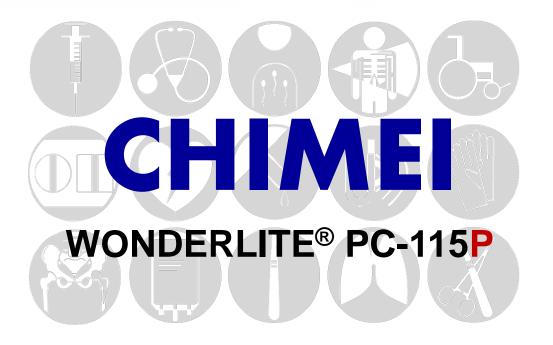
# WONDERLITE® PC-115P Introduction

bonding your moments

### What is PC-115P



"P" stands for pharmacological package

### **Biocompatibility**

PC-115P meets the biocompatibility requirements of ISO 10993.

Test Items	SGS		
In Vitro Cytotoxicity Test-MTT Assay (ISO10993-5)	WONDERLITE <sup>®</sup> PC-115P		
Acute Systemic Toxicity Study (ISO 10993-11)	<lot 6c252051="" no.:=""> In Väro Cytoto xicity Test -MTT Assay FINAL REPORT</lot>		
Hemolysis Test (ISO 10993-4)	Sponsor: CHI MEI Corporation Testing Institution: SGS Taiwan Lid. Ultra Trace & Autostrial Safety Hygione		
Skin Sensitization Study (ISO 10993-10)	Repart No.: UP/2016/B0883		
White Rabbit Intracutaneous Irritation Test (ISO 10993-10)	Mode: 1 The supercellship reports invalid/if concepts/production for construct of the reports induction of a finder resy to produce and definitions of the finder of the reports induction of the report ind		

### **Prosperity of PC-115P**

Properties	ISO Test Method	Test Condition	Unit	PC-115P
Melt Flow Index	1133	300°C × 1.2KG	ml/10 min	15
Mass Density	1183	23 °C	g/cm <sup>3</sup>	1.2
Tensile Strength	527	50 mm/min, yield	MPa	64
		50 mm/min, break	MPa	70
Tensile Elongation	527	50 mm/min	%	120
Flexural Strength	178	2 mm/min	MPa	90
Flexural Modulus		2 mm/min	GPa	2.4
Izod Impact Strength	180/4A	23 °C Notched	KJ/m <sup>2</sup>	70
		-30 °C Notched	KJ/m <sup>2</sup>	-
Charpy Impact Strength	470	23 °C Notched	KJ/m <sup>2</sup>	70
	179	-30 °C Notched	KJ/m <sup>2</sup>	-
Vicat Softening Temp.	306	1 Kg,50 °C/hr	°C	150
		5 Kg,50 °C/hr	°C	145
Heat Distortion Temp.	75/A	1.8 MPa Unannealed	°C	128
		1.8 MPa Annealed	°C	143
Coefficient of Linear Thermal Expansion	11359	-	-	6.0~8.0x10-5

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### **Sterilization Methods**

#### ✓ PC-115P is suitable for both ethylene oxide (EtO) gas and gamma radiation sterilization.

Sterilization Method	PC-115P (Natural)	PC-115P (Bluish)
Ethylene Oxide (EtO)	Yes	Yes
Gamma Radiation	(Yes)*	Yes

\*After exposed to gamma sterilization at 25 kGy, PC-115P (natural) keeps good retention of physical properties but becomes yellowish.



Luer connector



Cannula for Laparoscopic surgery





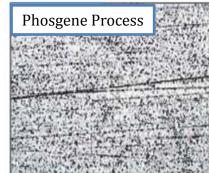


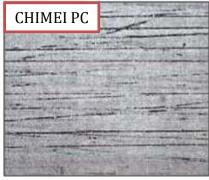
# Why CHIMEI?

- CHIMEI-Asahi Phosgene-Free Process (Green and clean process)
  - Chloride-free
  - Low mold contamination due to low oligomers
  - Better flowability; lower residual stress

#### Mold Corrosion Simulation Test

PC from different process routes were placed on metal plates, heated up to 300°C for 24 hours.





No corrosion on the plated.

The above experiment is only for reference.

The plated was badly corroded.

## **Processing Conditions**

- A. Pre-drying 120°C x 4 hrs depending on a) Humidity
  - b) Storage conditions
  - c) Dryer's performance
- Β. **Barrel Setting Profile** Compression Grade / Application Nozzle Feeding zone Mold Temperature \* zone max.(°C) 300 310 300 **PC-115P** 70 - 120 min.(°C) 250 250 230

\* varying with a) Thickness of molded articles; b) Cooling system design; c) Gate and runner system

#### NOTE :

- 1. Keep the resin from dust and contamination during handling and production.
- 2. Do not retain the hot melt at the barrel for a long time between injection cycles.
- 3. Temperature setting of manifold system should not exceed 330°C to avoid melt from degrading.
- 4. Heat decomposing resins are not recommended for purging the residual WONDERLITE® in barrel of injection machine and extruder.

# Thanks for Your Attention

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