

# Integra™ PC 5025IR

Polycarbonate  
PolySource, LLC

## Message:

PC 5025IR polycarbonate resin offers superior mechanical properties, good dimensional stability and high electrical performance, allowing it to be widely used for electrical, electronic, appliance, automotive and optical industries. PC 5025IR is a polycarbonate resin grade which has high low temperature impact strength in combination with superior mechanical and physical property.

### CHARACTERISTICS

- Superior low temperature impact resistance
- Workable under a wide range of temperatures
- Good dimensional stability
- Good weather resistance
- Good flow-ability
- High electrical performance
- Low moisture absorbency

### APPLICATIONS

PC 5025IR resin grade is used for electric and electronic applications, food contact material and etc.  
Medium viscosity. Transparent colors only.

General Information			
Features	Good dimensional stability		
	Low hygroscopicity		
	Good electrical performance		
	Good liquidity		
	Low temperature impact resistance		
	Good weather resistance		
	Compliance of Food Exposure		
	Medium viscosity		
Uses	Electrical/Electronic Applications		
	Non-specific food applications		
	Optical applications		
	Home appliance components		
	Application in Automobile Field		
Appearance	Clear/transparent		
Forms	Particle		
Processing Method	Injection molding		
Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.20	g/cm <sup>3</sup>	ASTM D792
Melt Mass-Flow Rate (MFR) (220°C/10.0 kg)	10	g/10 min	ASTM D1238
Molding Shrinkage - Flow	0.50 - 0.70	%	ASTM D955
Water Absorption (Equilibrium)	0.15	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method

Tensile Strength (Yield)	70.3	MPa	ASTM D638
Tensile Elongation (Break)	120	%	ASTM D638
Flexural Modulus	2060	MPa	ASTM D790
Flexural Strength (Yield)	86.2	MPa	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (23°C, 3.18 mm)	910	J/m	ASTM D256
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (1.8 MPa, Unannealed)	135	°C	ASTM D648
CLTE - Flow	5.0E-5 - 7.0E-5	cm/cm/°C	ASTM D696
Electrical	Nominal Value	Unit	Test Method
Volume Resistivity	4.0E+16	ohms·cm	ASTM D257
Dielectric Strength	30	kV/mm	ASTM D149
Arc Resistance	120	sec	ASTM D495
Flammability	Nominal Value	Unit	Test Method
Flame Rating (1.6 mm)	V-2		UL 94
Injection	Nominal Value	Unit	
Drying Temperature	120	°C	
Drying Time	3.0 - 5.0	hr	
Suggested Max Moisture	0.020	%	
Rear Temperature	245 - 270	°C	
Middle Temperature	260 - 285	°C	
Front Temperature	275 - 300	°C	
Nozzle Temperature	275 - 310	°C	
Processing (Melt) Temp	275 - 310	°C	
Mold Temperature	65 - 105	°C	
Back Pressure	0.250 - 0.703	MPa	
Screw Speed	40 - 70	rpm	
Vent Depth	0.020 - 0.079	mm	

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

#### Recommended distributors for this material

### Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China



WECHAT