

Product Texts

IFX121RA is a low viscosity, infra-red absorbing, polycarbonate grade-color.

Processing/Physical Characteristics

	Value	Unit	Test Standard
ASTM Data			
Melt Flow Index, MFI	18.5	g/10min	ASTM D 1238
Temperature	300	°C	-
Load	1.2	kg	-

Mechanical properties

	Value	Unit	Test Standard
ASTM Data			
Tensile Strength at Yield	62	MPa	ASTM D 638
Tensile Strength at Break	68	MPa	ASTM D 638
Elongation at Yield	7	%	ASTM D 638
Elongation at Break	125	%	ASTM D 638
Flexural Modulus	2340	MPa	ASTM D 790
Izod Impact notched, 1/8 in	694	J/m	ASTM D 256
Izod Impact unnotched, 1/8 in	3200	J/m	ASTM D 256

Thermal properties

	Value	Unit	Test Standard
ASTM Data			
Coefficient of Thermal Expansion, MD	68.4	E-6/K	ASTM D 696
DTUL @ 66 psi	137	°C	ASTM D 648
DTUL @ 264 psi	129	°C	ASTM D 648
Vicat Temperature	154	°C	ASTM D 1525
Thermal Conductivity, solid state	0.036	W/(m K)	ASTM C 177
Specific Heat	1250	J/(kg K)	ASTM C 351

Other properties

	Value	Unit	Test Standard
Water Absorption, 24hr	0.15	%	ASTM D 570
Water Absorption, Equilibrium	0.58	%	ASTM D 570
Density	1200	kg/m ³	ASTM D 792

Processing Recommendation Injection Molding

	Value	Unit	Test Standard
Pre-drying - Temperature	120	°C	-
Pre-drying - Time	3 - 4	h	-
Processing humidity	≤0.02	%	-
Melt temperature	280 - 305	°C	-
Mold temperature	70 - 95	°C	-
Zone 1	260 - 280	°C	-
Zone 2	270 - 295	°C	-
Zone 3	280 - 305	°C	-
Nozzle temperature	275 - 300	°C	-
Screw speed	40 - 70	rpm	-
Back pressure	0.3 - 0.7	MPa	-

Characteristics**Processing**

Injection Molding

Special Characteristics

Transparent

Applications

Electrical and Electronical

Regional Availability

North America, Europe, Asia Pacific, South and Central America