CYCOLAC™ Resin INP630

Europe-Africa-Middle East: COMMERCIAL

INP630 is a specialty polymer that increases the service temperature of products. Can be used with a impact modifier to provide impact strength as well as high heat resistance. Provides excellent high heat resistance in thermoplastic polymers. Offers excellent flow properties in outdoor applications.

TYPICAL PROPERTIES[1]	TYPICAL VALUE	Unit	Standard
MECHANICAL			
Flexural Stress, yld, 1.3 mm/min, 50 mm span	1170	kgf/cm²	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	39500	kgf/cm²	ASTM D 790
Flexural Stress, yield, 2 mm/min	58	MPa	ISO 178
Flexural Modulus, 2 mm/min	3620	MPa	ISO 178
IMPACT			
Izod Impact, notched, 23°C	1	cm-kgf/cm	ASTM D 256
Izod Impact, notched, -30°C	1	cm-kgf/cm	ASTM D 256
Izod Impact, notched 80*10*4 +23°C	3	kJ/m²	ISO 180/1A
Izod Impact, notched 80*10*4 -30°C	1	kJ/m²	ISO 180/1A
Charpy Impact, notched, 23°C	1	kJ/m²	ISO 179/2C
THERMAL			
HDT, 0.45 MPa, 3.2 mm, unannealed	110	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	100	°C	ASTM D 648
Vicat Softening Temp, Rate B/50	116	°C	ISO 306
Vicat Softening Temp, Rate B/120	118	°C	ISO 306
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	99	°C	ISO 75/Af
PHYSICAL			
Specific Gravity	1.09	-	ASTM D 792
Melt Flow Rate, 230°C/3.8 kgf	10.9	g/10 min	ASTM D 1238
Density	1.09	g/cm³	ISO 1183
Melt Flow Rate, 220°C/10.0 kg	21	g/10 min	ISO 1133
OPTICAL			
Yellowness Index	6	-	ASTM D 1925

(1) Typical values only. Variations within normal tolerances are possible for various colors. All values are measured after at least 48 hours storage at 23°C/50% relative humidity. All properties, except the melt volume and melt flow rates, are measured on injection molded samples. All samples tested under ISO test standards are prepared according to ISO 294.

(2) Only typical data for selection purposes. Not to be used for part or tool design.
(3) This rating is not intended to reflect hazards presented by this or any other material under actual fire conditions.
(4) Internal measurements according to UL standards.
(5) Measurements made from laboratory test coupon. Actual shrinkage may vary outside of range due to differences in processing conditions, equipment, part geometry and tool design. It is recommended that mold shrinkage studies be performed with surrogate or legacy tooling prior to cutting tools for new molded article.
(6) Needs hard coat to consistently pass 60 sec Vertical Burn.

Source GMD, last updated:

PLEASE CONTACT YOUR LOCAL SALES OFFICE FOR AVAILABILITY IN YOUR AREA