



TRIEX® 3025U(400)

Samyang Corporation - Polycarbonate

Tuesday, November 5, 2019

General Information

Product Description

TRIEX 3025U(400) 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
- Good flow-ability
- Workable under a wide range of temperatures (-100 °C ~ 135 °C)
- High electrical performance
- Good dimensional stability
- Low moisture absorbency
- Good weather resistance

Applications:

- TRIEX 3025U(400) resin grade is used for UV cut-off up to 400nm.
- Medium viscosity. Transparent colors only.

General

Material Status	• Commercial: Active		
Availability	• Asia Pacific	• Europe	• North America
Features	• Good Dimensional Stability • Good Electrical Properties • Good Flow	• Good Weather Resistance • Low Moisture Absorption • Low Temperature Impact Resistance	• Medium Viscosity
Uses	• Appliances • Automotive Applications	• Electrical/Electronic Applications • Optical Applications	
Appearance	• Clear/Transparent		
Processing Method	• Injection Molding		

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.20		ASTM D792
Melt Mass-Flow Rate (300°C/1.2 kg)	8.0	g/10 min	ASTM D1238
Water Absorption (24 hr)	0.15	%	ASTM D570
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Yield)	10200	psi	ASTM D638
Tensile Elongation (Break)	140	%	ASTM D638
Flexural Modulus	327000	psi	ASTM D790
Flexural Strength (Yield)	13200	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F, 0.125 in)	17	ft-lb/in	ASTM D256
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load 264 psi, Unannealed	273	°F	ASTM D648
CLTE - Flow	2.8E-5 to 3.9E-5	in/in/°F	ASTM D696

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Electrical	Nominal Value	Unit	Test Method
Volume Resistivity	4.0E+16	ohms·cm	ASTM D257
Dielectric Strength	760	V/mil	ASTM D149
Arc Resistance	120	sec	ASTM D495
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.06 in)	V-2		UL 94
Optical	Nominal Value	Unit	Test Method
Haze	0.400	%	ASTM D1003

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	248	°F
Drying Time	3.0 to 5.0	hr
Suggested Max Moisture	< 0.020	%
Rear Temperature	455 to 500	°F
Middle Temperature	482 to 527	°F
Front Temperature	509 to 554	°F
Nozzle Temperature	509 to 572	°F
Processing (Melt) Temp	509 to 572	°F
Mold Temperature	149 to 221	°F
Back Pressure	36.3 to 102	psi
Screw Speed	40 to 70	rpm
Vent Depth	7.9E-4 to 3.1E-3	in

Notes

¹ Typical properties: these are not to be construed as specifications.