CALIBRE™ 1602 LTD

Trinseo - Polycarbonate Resin

Tuesday, November 5, 2019

General Information

Product Description

CALIBRE™ 1602 LTD Polycarbonate Resin is designed to have good low temperature impact resistance compared to standard polycarbonate. The material has improved impact performance after heat aging relative to standard polycarbonate. The polymer features a good balance of mechanical properties.

Main Characteristics

- Long-term impact performance
- Good low temperature impact resistance
- UV stabilizer and mold release

Applications

- Injection molding applications
- Opaque applications
- Durables, Mining hats

General			
Material Status	• Commercial: Active		
Availability	• North America		
Additive	• Mold Release	• UV Stabilizer	
Features	• Heat Aging Resistant	• High Impact Resistance	• Low Temperature Impact Resistance
Uses	• Safety Helmets		
Appearance	• Opaque		
Forms	• Pellets		
Processing Method	• Injection Molding		

ASTM & ISO Properties [1]

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.18		ASTM D792
Density	1.18	g/cm³	ISO 1183/B
Melt Mass-Flow Rate (300°C/1.2 kg)	6.0	g/10 min	ASTM D1238
Melt Mass-Flow Rate (MFR) (300°C/1.2 kg)	6.0	g/10 min	ISO 1133
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus [2]	280000	psi	ASTM D638
Tensile Strength [2] (Yield)	8250	psi	ASTM D638
Flexural Modulus	298000	psi	ASTM D790
Flexural Strength	11300	psi	ASTM D790
Impact	**Nominal Value**	**Unit**	**Test Method**
Notched Izod Impact			ASTM D256
-40°F	8.9	ft·lb/in	
73°F	10	ft·lb/in	
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load (66 psi, Annealed)	277	°F	ASTM D648
Deflection Temperature Under Load			ASTM D648
264 psi, Unannealed	251	°F	

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Notes

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

[2] 2.0 in/min