CALIBRE™ 303-17

Trinseo - Polycarbonate Resin

General Information

Product Description

CALIBRE™ 303-17 Polycarbonate resin offers exceptional impact resistance and heat distortion resistance. The material contains UV stabilizer and mold release and is offered in transparent and other customized colors.

Govt. and Industry Standards

- Underwriters Laboratory, inc (UL)

Applications:

- Appliances;
- Automotive Applications;
- Business Equipment;
- Consumer Applications
- Displays
- Electrical/Electronic Applications
- Household Goods
- Lighting Applications
- Rigid Packaging
- Transparent Parts

General			
Additive	• Mold Release	• UV Stabilizer	
Features	• High Impact Resistance	• Medium Flow	• UV Resistant
Uses	• Appliances • Automotive Applications	• Business Equipment • Consumer Applications	
RoHS Compliance	• RoHS Compliant		
Appearance	• Clear/Transparent		
Forms	• Pellets		
Processing Method	• Injection Molding		

Properties [1]

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.20		ASTM D792
Density	1.20	g/cm³	ISO 1183
Melt Mass-Flow Rate (MFR) (300°C/1.2 kg)	17	g/10 min	ASTM D1238
Melt Mass-Flow Rate (MFR) (300°C/1.2 kg)	17	g/10 min	ISO 1133
Molding Shrinkage - Flow	0.50 to 0.70	%	ISO 294-4
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus	354000	psi	ISO 527-1/1
Tensile Stress (Yield)	9280	psi	ISO 527-2/50
Tensile Stress (Break)	9430	psi	ISO 527-2/50
Tensile Strain (Break)	110	%	ISO 527-2/50
Flexural Modulus [2]	348000	psi	ISO 178

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Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-22°F	5.2	ft·lb/in²	
73°F	9.5	ft·lb/in²	
Instrumented Dart Impact [3] (73°F, Total Energy)	584	in·lb	ASTM D3763
Multi-Axial Instrumented Impact Energy [4]			ISO 6603-2
73°F, Total Penetration Energy	41.3	ft·lb	

Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	279	°F	ISO 75-2/B
Deflection Temperature Under Load			ISO 75-2/A
264 psi, Unannealed	255	°F	
Vicat Softening Temperature	288	°F	ISO 306/B50
CLTE - Flow (-22 to 230°F)	4.4E-5	in/in/°F	ASTM D696
CLTE - Transverse (-22 to 230°F)	4.4E-5	in/in/°F	ASTM D696

Flammability	Nominal Value	Unit	Test Method
Flame Rating [5]			UL 94
0.020 in	V-2		
0.06 in	V-2		
0.10 in	V-2		
0.12 in	V-2		

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	248	°F
Drying Time	4.0	hr
Processing (Melt) Temp	500 to 554	°F
Mold Temperature	158 to 194	°F

Notes

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

[2] 0.079 in/min

[3] 21.7 ft/sec

[4] 14.4 ft/sec

[5] This rating not intended to reflect hazards presented by this or any other material under actual fire conditions.