Duratron® T5530

Polyamide-imide

Quadrant Engineering Plastic Products

Message:

Duratron® T5530 is 30% glass reinforced, compression molded PAI. It is ideal for higher load structural or electronic applications. This grade is similar in composition to Duratron® T5030 PAI. It is selected for larger shapes or when the greatest degree of dimensional control is required.
Duratron® PLA is the highest performing melt processable plastic. It has superior resistance to elevated temperatures. It is capable of performing under severe stress conditions at continuous temperatures to 500°F (260°C). Parts machined from Duratron® PLA stock shapes provide greater compressive strength and higher impact resistance than most advanced engineering plastics. Its extremely low coefficient of linear thermal expansion and high creep resistance deliver excellent dimensional stability over its entire use range. Duratron® PLA is an amorphous material with a Tg (glass transition temperature) of 537°F (280°C).
Data provided by Quadrant Engineering Plastic Products from tests on stock shapes and parts produced by Quadrant EPP.

General Information	
Filler / Reinforcement	Glass Fiber,30% Filler by Weight
Features	Acid Resistant Alcohol Resistant Amorphous Good Chemical Resistance Good Compressive Strength Good Creep Resistance Good Dimensional Stability Good Stiffness Good Thermal Stability Good Wear Resistance High Impact Resistance High Strength Hydrocarbon Resistant Solvent Resistant
Uses	Electrical/Electronic Applications Structural Parts
Forms	Customizable Forms Disc Preformed Parts Rod Sheet Tubing
Processing Method	Compression Molding

Physical	Nominal Value	Unit	Test Method

Specific Gravity	1.61	g/cm³	ASTM D792
Water Absorption			ASTM D570
24 hr	0.30	%	
Saturation	1.5	%	
Hardness	**Nominal Value**	**Unit**	**Test Method**
Rockwell Hardness			ASTM D785
E-Scale	85		
M-Scale	125		
Durometer Hardness (Shore D)	90		ASTM D2240
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus	6210	MPa	ASTM D638
Tensile Strength (Ultimate)	103	MPa	ASTM D638
Tensile Elongation (Break)	3.0	%	ASTM D638
Flexural Modulus	6210	MPa	ASTM D790
Flexural Strength (Yield)	138	MPa	ASTM D790
Compressive Modulus	4140	MPa	ASTM D695
Compressive Strength (10% Strain)	186	MPa	ASTM D695
Coefficient of Friction (vs. Steel - Static)	0.20		Internal Method
Impact	**Nominal Value**	**Unit**	**Test Method**
Notched Izod Impact	37	J/m	ASTM D256A
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load (1.8 MPa, Unannealed)	271	°C	ASTM D648
Maximum Use Temperature - Long Term, Air	260	°C	
Limiting Pressure Velocity [1]	0.701	MPa·m/s	Internal Method
Glass Transition Temperature	275	°C	ASTM D3418
CLTE - Flow [2] (-40 to 149°C)	4.7E-5	cm/cm/°C	ASTM E831
Thermal Conductivity	0.36	W/m/K	ASTM F433
Electrical	**Nominal Value**	**Unit**	**Test Method**
Surface Resistivity [3]	> 1.0E+13	ohms	Internal Method
Dielectric Strength [4]	28	kV/mm	ASTM D149
Dielectric Constant (1 MHz)	6.30		ASTM D150
Dissipation Factor (1 MHz)	0.050		ASTM D150
Flammability	**Nominal Value**	**Unit**	**Test Method**
Flame Rating (3.18 mm, Estimated Rating)	V-0		UL 94
NOTE			
1.	4:1 safety factor		
2.	68°F		
3.	EOS/ESD S11.11		
4.	Method A (Short-Time)		

infringement occurs, please contact us immediately.

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China