Ultramid® SEG7

Polyamide 6

BASF Corporation

Message:

Ultramid SEG7 is a 35% glass reinforced, injection molding type 6 nylon requiring high strength, surface aesthetics, and good processability. This product has excellent surface appearance while maintaining a good balance of physical properties, such as high strength, improved toughness, and chemical resistance. It features superior flow properties, and is suited for parts having thinner walls and those requiring long lengths. It shows lower pressure, temperature, and cycle time requirements than conventional grades.
Applications
Applications include power tool, but can be used wherever strength and appearance are critical requirements, for example, automotive applications (door handles and mirrors).

General Information			
UL YellowCard	E36632-231203		
Filler / Reinforcement	Glass Fiber,35% Filler by Weight		
Features	Good Chemical Resistance Good Processability Good Toughness High Flow High Strength Pleasing Surface Appearance		
Uses	Automotive Applications Power/Other Tools Thin-walled Parts		
Agency Ratings	EC 1907/2006 (REACH)		
RoHS Compliance	RoHS Compliant		
Forms	Pellets		
Processing Method	Injection Molding		
Physical	**Nominal Value**	**Unit**	**Test Method**
Specific Gravity	1.41	g/cm³	ASTM D792, ISO 1183
Molding Shrinkage - Flow (3.18 mm)	0.30	%	
Water Absorption			
24 hr	1.0	%	ASTM D570
23°C, 24 hr	1.0	%	ISO 62
Saturation	6.3	%	ASTM D570
Saturation, 23°C	6.3	%	ISO 62
Equilibrium, 50% RH	1.7	%	ASTM D570
Equilibrium, 23°C, 50% RH	1.7	%	ISO 62
Hardness	**Nominal Value**	**Unit**	**Test Method**
Rockwell Hardness (R-Scale)	120		ASTM D785

Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Break, 23°C)	185	MPa	ASTM D638, ISO 527-2
Tensile Elongation (Break, 23°C)	3.5	%	ASTM D638, ISO 527-2
Flexural Modulus (23°C)	9670	MPa	ASTM D790
Flexural Strength (23°C)	290	MPa	ASTM D790
Impact	**Nominal Value**	**Unit**	**Test Method**
Notched Izod Impact (23°C)	150	J/m	ASTM D256
Drop Impact Resistance (23°C)	3.80	J	Internal Method
Thermal	**Nominal Value**	**Unit**	**Test Method**
Peak Melting Temperature	220	°C	ASTM D3418, ISO 3146
RTI Elec			UL 746
0.710 mm	130	°C	
1.50 mm	140	°C	
3.00 mm	140	°C	
RTI Imp			UL 746
0.710 mm	115	°C	
1.50 mm	115	°C	
3.00 mm	120	°C	
RTI Str			UL 746
0.710 mm	120	°C	
1.50 mm	120	°C	
3.00 mm	140	°C	
Flammability	**Nominal Value**		**Test Method**
Flame Rating			UL 94
1.50 mm	HB		
3.00 mm	HB		
Injection	**Nominal Value**	**Unit**	
Drying Temperature	83.0	°C	
Drying Time	2.0 to 4.0	hr	
Suggested Max Moisture	0.15	%	
Processing (Melt) Temp	270 to 295	°C	
Mold Temperature	80.0 to 95.0	°C	
Injection Pressure	3.50 to 12.5	MPa	
Injection Rate	Fast		

Recommended distributors for this material

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