

ASTALON™ S1000

Polycarbonate
Marplex Australia Pty. Ltd.

Message:

ASTALON™ S1000 / S1001 / S1003 are the medium viscosity (low/medium melt flow) grades in the ASTALON™ range and are well suited to general purpose injection moulding applications. Offering an exceptional combination of transparency, toughness, heat resistance, flame retardancy and processability, typical applications include food processors and other kitchen appliances, electrical power tool housings, medical dialysis components and industrial hoist switch casings.

Note: [Standard grade = S1000] / [FDA approved = S1001] / [Steam resistant = S1003].

General Information			
Features	Flame Retardant		
	General Purpose		
	Good Processability		
	Good Toughness		
	Medium Clarity		
	Medium Flow		
	Medium Heat Resistance		
	Medium Viscosity		
Uses	Appliances		
	Electrical/Electronic Applications		
	General Purpose		
	Housings		
	Medical/Healthcare Applications		
	Power/Other Tools		
Processing Method	Injection Molding		
Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.20	g/cm ³	ASTM D792
Melt Mass-Flow Rate (MFR) (300°C/1.2 kg)	8.5	g/10 min	ASTM D1238
Molding Shrinkage - Flow (3.00 mm)	0.60	%	ASTM D955
Water Absorption (24 hr)	0.24	%	ASTM D570
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale)	123		ASTM D785
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength ¹ (3.20 mm)	65.0	MPa	ASTM D638
Tensile Elongation ² (Break, 3.20 mm)	120	%	ASTM D638
Flexural Modulus ³ (6.40 mm)	2350	MPa	ASTM D790
Flexural Strength ⁴ (6.40 mm)	90.0	MPa	ASTM D790
Impact	Nominal Value	Unit	Test Method

Notched Izod Impact (3.20 mm)	900	J/m	ASTM D256
Gardner Impact (3.20 mm)	> 85.0	J	ASTM D3029
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			ASTM D648
0.45 MPa, Unannealed, 6.40 mm	153	°C	
1.8 MPa, Unannealed, 6.40 mm	138	°C	
CLTE - Flow	6.5E-5	cm/cm/°C	ASTM D696
Electrical	Nominal Value		Test Method
Dielectric Constant	2.85		ASTM D150
Flammability	Nominal Value		Test Method
Flame Rating (1.60 mm)	V-2		UL 94
Optical	Nominal Value	Unit	Test Method
Transmittance (Total, 3000 µm)	85.0	%	ASTM D1003
Injection	Nominal Value	Unit	
Drying Temperature	120 to 125	°C	
Drying Time	4.0 to 6.0	hr	
Rear Temperature	245 to 265	°C	
Middle Temperature	260 to 280	°C	
Front Temperature	275 to 295	°C	
Processing (Melt) Temp	270 to 300	°C	
Mold Temperature	60.0 to 110	°C	
Injection Pressure	60.0 to 140	MPa	
Injection Rate	Moderate		
Back Pressure	0.100 to 0.500	MPa	
Screw Speed	40 to 60	rpm	
Clamp Tonnage	4.0 to 8.0	kN/cm ²	
NOTE			
1.	20 mm/min		
2.	20 mm/min		
3.	2.8 mm/min		
4.	2.8 mm/min		

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any 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



WECHAT