ASTALON™ S1000UR

Polycarbonate

Marplex Australia Pty. Ltd.

Message:

ASTALON™ S1000UR / S1001UR / S1003UR are the medium viscosity (low/medium melt flow) grades in the ASTALON™ range and are well suited to general purpose injection moulding applications which require a mould release agent (R) and UV stabilisation (U). Offering an exceptional combination of transparency, toughness, heat resistance, flame retardancy and processability, typical applications include automotive taillight housings and safety helmet visors.
Note: [Standard grade = S1000UR] / [FDA approved = S1001UR] / [Steam resistant = S1003UR].

General Information	
Additive	Mold Release
	UV Stabilizer
Features	Flame Retardant
	General Purpose
	Good Processability
	Good Toughness
	Medium Clarity
	Medium Flow
	Medium Heat Resistance
	Medium Viscosity
Uses	Automotive Applications
	General Purpose
	Housings
	Safety Equipment
Processing Method	Injection Molding

Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.20	g/cm³	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**	**Unit**	**Test Method**
Volume Resistivity	2.1E+16	ohms·cm	ASTM D257
Dielectric Constant	2.85		ASTM D150
Flammability	**Nominal Value**	**Unit**	**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		

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