ASTAGLAS™ MV825I

Polymethyl Methacrylate Acrylic

Marplex Australia Pty. Ltd.

Product Description
ASTAGLAS™ MV825I is a toughened high heat resistance moulding grade of Poly(Methyl Methacrylate) in the ASTAGLAS™ range. Typical applications are tinted or solid colour components requiring heat resistance and moulded component strength.

General			
Material Status	• Commercial: Active		
Availability	• Asia Pacific	• North America	• South America
Features	• High Heat Resistance	• High Strength	

Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.18	g/cm³	ASTM D792
Melt Mass-Flow Rate (MFR) (230°C/3.8 kg)	3.0	g/10 min	ASTM D1238
Molding Shrinkage - Flow	0.30 to 0.70	%	ASTM D955
Water Absorption (24 hr)	0.30	%	ASTM D570
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus [2] (3.20 mm)	3000	MPa	ASTM D638
Tensile Strength [2] (3.20 mm)	65.0	MPa	ASTM D638
Tensile Elongation [2] (Break, 3.20 mm)	15	%	ASTM D638
Flexural Modulus [3] (3.20 mm)	2850	MPa	ASTM D790
Flexural Strength [3] (3.20 mm)	95.0	MPa	ASTM D790
Impact	**Nominal Value**	**Unit**	**Test Method**
Notched Izod Impact (3.20 mm)	45	J/m	ASTM D256
Falling Ball Impact	2.00	J	ASTM D6717
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load			ASTM D648
1.8 MPa, Annealed, 6.40 mm	98.0	°C	
Vicat Softening Temperature	101	°C	ASTM D1525 [4]
CLTE - Flow	0.000070	cm/cm/°C	ASTM D696
Flammability	**Nominal Value**	**Unit**	**Test Method**
Flame Rating - UL (1.60 mm)	HB		UL 94
Optical	**Nominal Value**	**Unit**	**Test Method**
Refractive Index	1.490		ASTM D542
Transmittance (Total, 3200 µm)	92.0	%	ASTM D1003
Haze (3200 µm)	< 2.0	%	ASTM D1003

Injection	Nominal Value	Unit
Drying Temperature	85.0 to 90.0	°C
Drying Time	3.0 to 5.0	hr
Rear Temperature	200 to 220	°C
Middle Temperature	210 to 230	°C
Front Temperature	220 to 240	°C
Processing (Melt) Temp	230 to 250	°C
Mold Temperature	50.0 to 90.0	°C
Injection Pressure	60.0 to 130	MPa
Injection Rate	Slow-Moderate	
Back Pressure	0.100 to 0.500	MPa
Screw Speed	40 to 60	rpm
Clamp Tonnage	5.0 to 9.0	kN/cm²

Notes

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

[2] 5.0 mm/min

[3] 1.3 mm/min

[4] Rate B (120°C/h), Loading 2 (50 N)