



POLYLAC® PA-758

CHI MEI CORPORATION - Methyl Methacrylate / ABS

Monday, November 4, 2019

General Information

Product Description

Transparent

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
RoHS Compliance	• RoHS Compliant		
Appearance	• Clear/Transparent		
Processing Method	• Injection Molding		
Resin ID (ISO 1043)	• >MABS<		

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.08		ASTM D792
Density (73°F)	1.08	g/cm ³	ISO 1183
Melt Mass-Flow Rate (200°C/5.0 kg)	3.0	g/10 min	ASTM D1238
Melt Mass-Flow Rate (MFR) (200°C/5.0 kg)	3.0	g/10 min	ISO 1133
Molding Shrinkage	0.30 to 0.70	%	ISO 294-4
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength ²	5760	psi	ASTM D638
Tensile Stress (Yield)	6090	psi	ISO 527-2/50
Tensile Stress (Break)	4790	psi	ISO 527-2/50
Tensile Elongation ² (Break)	40	%	ASTM D638
Tensile Strain (Break)	40	%	ISO 527-2/50
Flexural Modulus ³	276000	psi	ASTM D790
Flexural Modulus ⁴	276000	psi	ISO 178
Flexural Strength ³	7820	psi	ASTM D790
Flexural Stress ⁴	8270	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength			ISO 179
-22°F	3.3	ft·lb/in ²	
73°F	6.7	ft·lb/in ²	
Notched Izod Impact			ASTM D256
73°F, 0.126 in	2.8	ft·lb/in	
73°F, 0.252 in	2.9	ft·lb/in	
Notched Izod Impact Strength			ISO 180/1A
-22°F	3.3	ft·lb/in ²	
73°F	6.7	ft·lb/in ²	
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale)	107		ASTM D785

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Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load 264 psi, Unannealed	190	°F	ASTM D648
Heat Deflection Temperature (264 psi, Unannealed)	171	°F	ISO 75-2/A
Deflection Temperature Under Load (264 psi, Annealed)	210	°F	ASTM D648
Heat Deflection Temperature (264 psi, Annealed)	207	°F	ISO 75-2/A
Vicat Softening Temperature	221	°F	ASTM D1525 ⁵
Vicat Softening Temperature			
--	219	°F	ISO 306/A50
--	205	°F	ISO 306/B50
CLTE - Flow	5.0E-5	in/in/°F	ISO 11359-2
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.06 in)	HB		UL 94

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	185	°F
Drying Time	3.0 to 5.0	hr
Rear Temperature	392 to 428	°F
Middle Temperature	428 to 482	°F
Front Temperature	428 to 482	°F
Processing (Melt) Temp	446 to 464	°F
Mold Temperature	122 to 158	°F
Injection Pressure	711 to 1140	psi
Holding Pressure	284 to 711	psi
Back Pressure	71.1 to 142	psi

Notes

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

² 0.24 in/min

³ 0.11 in/min

⁴ 0.079 in/min

⁵ Rate A (50°C/h), Loading 1 (10 N)