



## POLYLAC® PA-758

## CHI MEI CORPORATION - Methyl Methacrylate / ABS

Thursday, January 31, 2019

General Information				
Product Description				
Transparent				
General				
Material Status	Commercial: Active			
RoHS Compliance	RoHS Compliant			
Appearance	Clear/Transparent			
Processing Method	Injection Molding			
Resin ID (ISO 1043)	• >MABS<			

ASTM and ISO Properties <sup>1</sup>					
Physical	Nominal Value	Unit	Test Method		
Density / Specific Gravity	1.08	g/cm³	ASTM D792		
Density (23°C)	1.08	g/cm³	ISO 1183		
Melt Mass-Flow Rate (MFR) (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 <sup>2</sup>	39.7	MPa	ASTM D638		
Tensile Stress (Yield)	42.0	MPa	ISO 527-2/50		
Tensile Stress (Break)	33.0	MPa	ISO 527-2/50		
Tensile Elongation <sup>2</sup> (Break)	40	%	ASTM D638		
Tensile Strain (Break)	40	%	ISO 527-2/50		
Flexural Modulus <sup>3</sup>	1900	MPa	ASTM D790		
Flexural Modulus <sup>4</sup>	1900	MPa	ISO 178		
Flexural Strength <sup>3</sup>	53.9	MPa	ASTM D790		
Flexural Stress <sup>4</sup>	57.0	MPa	ISO 178		
Impact	Nominal Value	Unit	Test Method		
Charpy Notched Impact Strength			ISO 179		
-30°C	7.0	kJ/m²			
23°C	14	kJ/m²			
Notched Izod Impact			ASTM D256		
23°C, 3.20 mm	150	J/m			
23°C, 6.40 mm	160	J/m			
Notched Izod Impact Strength			ISO 180/1A		
-30°C	7.0	kJ/m²			
23°C	14	kJ/m²			
Hardness	Nominal Value	Unit	Test Method		
Rockwell Hardness (R-Scale)	107		ASTM D785		

## POLYLAC® PA-758 CHI MEI CORPORATION - Methyl Methacrylate / ABS

Nominal Value	Unit	Test Method
		ASTM D648
88.0	°C	
77.0	°C	ISO 75-2/A
99.0	°C	ASTM D648
97.0	°C	ISO 75-2/A
105	°C	ASTM D1525 5
104	°C	ISO 306/A50
96.0	°C	ISO 306/B50
9.0E-5	cm/cm/°C	ISO 11359-2
Nominal Value	Unit	Test Method
HB		UL 94
	88.0 77.0 99.0 97.0 105 104 96.0 9.0E-5 Nominal Value	88.0 °C 77.0 °C 99.0 °C 97.0 °C 105 °C 104 °C 96.0 °C 9.0E-5 cm/cm/°C Nominal Value Unit

Processing Information					
Injection	Nominal Value	Unit			
Drying Temperature	85	°C			
Drying Time	3.0 to 5.0	hr			
Rear Temperature	200 to 220	°C			
Middle Temperature	220 to 250	°C			
Front Temperature	220 to 250	°C			
Processing (Melt) Temp	230 to 240	°C			
Mold Temperature	50 to 70	°C			
Injection Pressure	4.90 to 7.85	MPa			
Holding Pressure	1.96 to 4.90	MPa			
Back Pressure	0.490 to 0.981	MPa			

## **Notes**

<sup>&</sup>lt;sup>1</sup> Typical properties: these are not to be construed as specifications.

<sup>&</sup>lt;sup>2</sup> 6.0 mm/min

<sup>&</sup>lt;sup>3</sup> 2.8 mm/min

<sup>4 2.0</sup> mm/min

<sup>&</sup>lt;sup>5</sup> Rate A (50°C/h), Loading 1 (10 N)