

## Technical Data

### Product Description

POLYLUX® (MABS) Typ C2      good flow transparent MABS grade

Generic MABS

This data represents typical values that have been calculated from all products classified as: Generic MABS

This information is provided for comparative purposes only.

General	POLYLUX® (MABS) Typ C2	Generic MABS
Manufacturer / Supplier	• LyondellBasell Industries	• Generic
Generic Symbol	• MABS	• MABS
Material Status	• Commercial: Active	• Commercial: Active
Search for UL Yellow Card	• LyondellBasell Industries	--
Availability	• Europe	• Africa & Middle East • Asia Pacific • Europe • Latin America • North America
Appearance	• Clear/Transparent	--
Processing Method	• Injection Molding	--
Resin ID (ISO 1043)	• MABS	--

Physical	POLYLUX® (MABS) Typ C2	Generic MABS	Unit	Test Method
Density / Specific Gravity				
--	--	1.06 to 1.11	g/cm³	ASTM D792
--	--	1.08 to 1.10	g/cm³	ISO 1183
--	1.09	--	g/cm³	ISO 1183/A
Melt Mass-Flow Rate (MFR)				
220°C/10.0 kg	--	2.0 to 25	g/10 min	ASTM D1238
220°C/10.0 kg	--	10 to 30	g/10 min	ISO 1133
Melt Volume-Flow Rate (MVR) (220°C/10.0 kg)	18	2.0 to 18	cm³/10min	ISO 1133
Molding Shrinkage				
Flow	--	0.50 to 0.56	%	ASTM D955
Across Flow	--	0.40 to 0.60	%	ASTM D955
--	--	0.40 to 0.60	%	ISO 294-4

Mechanical	POLYLUX® (MABS) Typ C2	Generic MABS	Unit	Test Method
Tensile Modulus				
--	--	1940 to 2650	MPa	ASTM D638
--	--	1880 to 2630	MPa	ISO 527-1
--	1900	--	MPa	ISO 527-1/1A/1



Mechanical	POLYLUX® (MABS) Typ C2	Generic MABS	Unit	Test Method
<b>Tensile Strength</b>				
Yield	--	36.9 to 59.0	MPa	ASTM D638
Yield	--	41.6 to 55.4	MPa	ISO 527-2
Yield	44.0	--	MPa	ISO 527-2/1A/50
Break	--	29.9 to 39.2	MPa	ASTM D638
Break	--	32.0 to 48.0	MPa	ISO 527-2
--	--	45.0 to 57.0	MPa	ISO 527-2
<b>Tensile Strain</b>				
Yield	--	3.0 to 4.0	%	ISO 527-2
Yield	3.5	--	%	ISO 527-2/1A/50
Break	--	15 to 26	%	ASTM D638
Break	--	5.0 to 21	%	ISO 527-2
<b>Flexural Modulus</b>				
--	--	1770 to 2850	MPa	ASTM D790
--	--	2200 to 2650	MPa	ISO 178
<b>Flexural Strength</b>				
--	--	53.7 to 96.0	MPa	ASTM D790
--	--	69.8 to 86.3	MPa	ISO 178
Impact	POLYLUX® (MABS) Typ C2	Generic MABS	Unit	Test Method
<b>Charpy Notched Impact Strength</b>				
--	--	2.0 to 15	kJ/m <sup>2</sup>	ISO 179
-30°C	9.0	--	kJ/m <sup>2</sup>	ISO 179/1eA
23°C	16	--	kJ/m <sup>2</sup>	ISO 179/1eA
<b>Charpy Unnotched Impact Strength</b>				
--	--	70 to 120	kJ/m <sup>2</sup>	ISO 179
-30°C	62	--	kJ/m <sup>2</sup>	ISO 179/1eU
23°C	79	--	kJ/m <sup>2</sup>	ISO 179/1eU
<b>Notched Izod Impact</b>				
--	--	20 to 170	J/m	ASTM D256
--	--	6.9 to 15	kJ/m <sup>2</sup>	ISO 180
23°C	17	--	kJ/m <sup>2</sup>	ISO 180/4A
Hardness	POLYLUX® (MABS) Typ C2	Generic MABS	Unit	Test Method
<b>Rockwell Hardness</b>				
--	--	105 to 118		ASTM D785
--	--	102 to 116		ISO 2039-2
Ball Indentation Hardness (H 358/30)	96.0	--	MPa	ISO 2039-1



Thermal	POLYLUX® (MABS) Typ C2	Generic MABS	Unit	Test Method
<b>Deflection Temperature Under Load</b>				
0.45 MPa, Unannealed	--	81.0 to 92.3	°C	ISO 75-2/B
0.45 MPa, Unannealed	92.0	--	°C	ISO 75-2/Bf
0.45 MPa, Annealed	--	85.0 to 94.0	°C	ISO 75-2/B
1.8 MPa, Unannealed	--	77.6 to 92.0	°C	ASTM D648
1.8 MPa, Unannealed	--	70.0 to 79.1	°C	ISO 75-2/A
1.8 MPa, Unannealed	79.0	--	°C	ISO 75-2/Af
1.8 MPa, Annealed	--	79.6 to 95.5	°C	ISO 75-2/A
<b>Vicat Softening Temperature</b>				
--	--	82.4 to 108	°C	ASTM D1525
--	93.0	--	°C	ISO 306/B50
--	103	--	°C	ISO 306/A50
--	--	86.0 to 105	°C	ISO 306
Electrical	POLYLUX® (MABS) Typ C2	Generic MABS	Unit	Test Method
Dissipation Factor	--	0.013 to 0.016		IEC 60250
Flammability	POLYLUX® (MABS) Typ C2	Generic MABS	Unit	Test Method
<b>Burning Rate</b>				
2.00 mm	< 100	--	mm/min	ISO 3795
2.00 mm	< 100	--	mm/min	FMVSS 302
<b>Flammability Classification (1.6 mm)</b>				
	HB	--		IEC 60695-11-10,-20
<b>Glow Wire Flammability Index</b>				
1.5 mm	675	--	°C	IEC 60695-2-12
3.0 mm	675	--	°C	
<b>Glow Wire Ignition Temperature</b>				
1.5 mm	700	--	°C	IEC 60695-2-13
3.0 mm	700	--	°C	
Optical	POLYLUX® (MABS) Typ C2	Generic MABS	Unit	Test Method
Light Transmittance	--	85.8 to 90.0	%	ASTM D1003
Haze	--	1.75 to 3.25	%	ASTM D1003
<b>Additional Information</b>				
POLYLUX® (MABS) Typ C2	1.) Not for use in food contact applications 2.) Not for use in medical or pharmaceutical applications			
Injection	POLYLUX® (MABS) Typ C2	Generic MABS	Unit	
Drying Temperature	70	70 to 85	°C	
Drying Time	2.0 to 4.0	2.0 to 4.0	hr	
Rear Temperature	--	185 to 220	°C	
Middle Temperature	--	200 to 216	°C	
Front Temperature	--	210 to 236	°C	
Nozzle Temperature	--	214 to 240	°C	
Processing (Melt) Temp	200 to 240	214 to 245	°C	
Mold Temperature	40 to 80	50 to 63	°C	



Injection	POLYLUX® (MABS) Typ C2	Generic MABS	Unit
Injection Pressure	--	121 to 155	MPa
Back Pressure	--	0.735 to 45.0	MPa
Screw Speed	--	45 to 100	rpm

**Injection Notes**

Generic  
MABS

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**Notes**

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

