

LyondellBasell® HP401R

Moplen HP401R is a homopolymer suitable for injection molding applications. It exhibits a high fluidity combined with a good stiffness. Moplen HP401R is suitable for food contact. Applications: Furniture, House wares.
Information provided by LyondellBasell.

Physical Properties	Metric	English	Comments
Density	0.905 g/cc	0.0327 lb/in ³	ISO 1183

Melt Flow	25 g/10 min @Load 2.16 kg, Temperature 230 °C	25 g/10 min @Load 4.76 lb, Temperature 446 °F	ISO 1133
-----------	---	---	----------

Mechanical Properties	Metric	English	Comments
Ball Indentation Hardness	70.0 MPa	10200 psi	ISO 2039-1

Tensile Strength, Yield	32.0 MPa	4640 psi	ISO 527-1,-2
-------------------------	----------	----------	--------------

Elongation at Break	>= 50 %	>= 50 %	ISO 527-1,-2
---------------------	---------	---------	--------------

Elongation at Yield	10 %	10 %	ISO 527-1,-2
---------------------	------	------	--------------

Tensile Modulus	1.35 GPa	196 ksi	ISO 527-1,-2
-----------------	----------	---------	--------------

Charpy Impact Unnotched	2.50 J/cm ² @Temperature 0.000 °C	11.9 ft-lb/in ² @Temperature 32.0 °F	type 1, edgewise; ISO 179
-------------------------	---	--	---------------------------

	10.5 J/cm ² @Temperature 23.0 °C	50.0 ft-lb/in ² @Temperature 73.4 °F	type 1, edgewise; ISO 179
--	--	--	---------------------------

Charpy Impact, Notched	0.200 J/cm ² @Temperature 23.0 °C	0.952 ft-lb/in ² @Temperature 73.4 °F	Type 1, Edgewise, Notch A; ISO 179
------------------------	---	---	------------------------------------

Thermal Properties	Metric	English	Comments
Deflection Temperature at 0.46 MPa (66 psi)	90.0 °C	194 °F	unannealed; ISO 75B-1,-2

Vicat Softening Point	85.0 °C	185 °F	B50, 50C/h, 50N; ISO 306
-----------------------	---------	---------------	--------------------------

	154 °C	309 °F	A50, 50C/h, 10N; ISO 306
--	--------	--------	--------------------------