

Technical Data

Product Description

Hostalen
PP H1022

Hostalen PP H1022 is a natural, basic stabilization polypropylene block copolymer with high melt viscosity and good low-temperature impact strength. For further details about the suitable applications for this material please contact LyondellBasell.

Generic
PP Impact Copolymer

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

This information is provided for comparative purposes only.

General	Hostalen PP H1022	Generic PP Impact Copolymer
Manufacturer / Supplier	<ul style="list-style-type: none"> LyondellBasell Industries 	<ul style="list-style-type: none"> Generic
Generic Symbol	<ul style="list-style-type: none"> PP Impact Copolymer 	<ul style="list-style-type: none"> PP Impact Copolymer
Material Status	<ul style="list-style-type: none"> Commercial: Active 	<ul style="list-style-type: none"> Commercial: Active
Literature ¹	<ul style="list-style-type: none"> Technical Datasheet 	--
Search for UL Yellow Card	<ul style="list-style-type: none"> LyondellBasell Industries Hostalen 	--
Availability	<ul style="list-style-type: none"> Africa & Middle East Asia Pacific Europe 	<ul style="list-style-type: none"> Africa & Middle East Asia Pacific Europe Latin America North America
Features	<ul style="list-style-type: none"> Block Copolymer 	--
Uses	<ul style="list-style-type: none"> Construction Applications Fittings Industrial Applications Piping 	--
Processing Method	<ul style="list-style-type: none"> Extrusion Blow Molding Pipe Extrusion Sheet Extrusion 	--

Physical	Hostalen PP H1022	Generic PP Impact Copolymer	Unit	Test Method
Density / Specific Gravity	--	0.892 to 0.908	g/cm ³	ASTM D792
--	0.901	0.898 to 0.909	g/cm ³	ISO 1183
--	--	0.900 to 0.911	g/cm ³	ASTM D1505
Melt Mass-Flow Rate (MFR)				
230°C/2.16 kg	--	0.30 to 37	g/10 min	ASTM D1238
190°C/5.0 kg	0.50	--	g/10 min	ISO 1133
230°C/2.16 kg	0.30	0.23 to 46	g/10 min	ISO 1133
230°C/5.0 kg	1.3	--	g/10 min	ISO 1133
Spiral Flow	--	79.1 to 80.0	cm	
Molding Shrinkage				
Flow	--	1.2 to 1.6	%	ASTM D955
Across Flow	--	1.1 to 1.7	%	ASTM D955
--	--	1.3 to 1.9	%	ISO 294-4
Water Absorption (24 hr)	--	0.020	%	ASTM D570



Mechanical	Hostalen PP H1022	Generic PP Impact Copolymer	Unit	Test Method
Tensile Modulus				
--	--	1150 to 1570	MPa	ASTM D638
--	1300	993 to 1630	MPa	ISO 527-1
Tensile Strength				
Yield	--	20.1 to 32.3	MPa	ASTM D638
Yield	30.0	18.6 to 30.5	MPa	ISO 527-2
Break	--	14.8 to 24.3	MPa	ASTM D638
Break	--	10.0 to 35.0	MPa	ISO 527-2
--	--	20.7 to 31.0	MPa	ASTM D638
Tensile Elongation				
Yield	--	3.0 to 13	%	ASTM D638
Yield	--	3.8 to 9.2	%	ISO 527-2
Yield, 23°C	13	--	%	ISO 527-2/50
Break	--	3.0 to 520	%	ASTM D638
Break	--	44 to 210	%	ISO 527-2
Tensile Creep Modulus (1000 hr)				
	--	418	MPa	ISO 899-1
Flexural Modulus				
--	--	920 to 1650	MPa	ASTM D790
--	--	831 to 1570	MPa	ISO 178
Flexural Strength				
	--	26.6 to 43.3	MPa	ASTM D790
Impact	Hostalen PP H1022	Generic PP Impact Copolymer	Unit	Test Method
Charpy Notched Impact Strength				
--	--	2.50 to 12.8	J/m	ASTM D256
--	--	1.0 to 13	kJ/m ²	ISO 179
-30°C	3.0	--	kJ/m ²	ISO 179/1eA
-20°C	4.0	--	kJ/m ²	ISO 179/1eA
0°C	15	--	kJ/m ²	ISO 179/1eA
23°C	50	--	kJ/m ²	ISO 179/1eA
Charpy Unnotched Impact Strength				
	--	2.2 to 190	kJ/m ²	ISO 179
Notched Izod Impact				
--	--	7.7 to 140	J/m	ASTM D256
--	--	1.9 to 12	kJ/m ²	ISO 180
Notched Izod Impact (Area)				
	--	4.40 to 52.0	kJ/m ²	ASTM D256
Unnotched Izod Impact				
	--	20 to 140	J/m	ASTM D4812
Instrumented Dart Impact				
	--	21.6 to 49.0	J	ASTM D3763
Gardner Impact				
	--	10.8 to 35.2	J	ASTM D3029
Gardner Impact				
	--	16.3 to 36.2	J	ASTM D5420



Hardness	Hostalen PP H1022	Generic PP Impact Copolymer	Unit	Test Method
Rockwell Hardness				
--	--	64 to 105		ASTM D785
--	--	54 to 101		ISO 2039-2
Durometer Hardness				
--	--	59 to 69		ASTM D2240
--	--	59 to 68		ISO 868
Shore D	63	--		ISO 868
Ball Indentation Hardness				ISO 2039-1
--	--	43.7 to 63.5	MPa	
H 132/30	55.0	--	MPa	
Thermal	Hostalen PP H1022	Generic PP Impact Copolymer	Unit	Test Method
Deflection Temperature Under Load				
0.45 MPa, Unannealed	--	71.9 to 126	°C	ASTM D648
0.45 MPa, Unannealed	93.0	73.3 to 107	°C	ISO 75-2/B
0.45 MPa, Annealed	--	104 to 139	°C	ASTM D648
1.8 MPa, Unannealed	--	48.0 to 57.5	°C	ASTM D648
1.8 MPa, Unannealed	--	47.7 to 55.7	°C	ISO 75-2/A
Vicat Softening Temperature				
--	--	133 to 150	°C	ASTM D1525
--	159	--	°C	ISO 306/A50
--	--	67.4 to 155	°C	ISO 306
Melting Temperature				
--	--	163	°C	ASTM D3418
--	--	163 to 168	°C	ISO 11357-3
--	164	163 to 165	°C	ISO 3146
Optical	Hostalen PP H1022	Generic PP Impact Copolymer	Unit	Test Method
Gloss	--	30 to 90		ASTM D2457
Haze	--	1.00 to 41.7	%	ASTM D1003

Disclaimer

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This grade is not intended for medical and pharmaceutical applications.

Injection	Hostalen PP H1022	Generic PP Impact Copolymer	Unit
Drying Temperature	--	79 to 93	°C
Drying Time	--	1.5 to 3.0	hr
Suggested Max Moisture	--	0.020 to 0.080	%
Rear Temperature	--	190 to 221	°C
Middle Temperature	--	200 to 250	°C
Front Temperature	--	205 to 260	°C
Nozzle Temperature	--	210 to 251	°C
Processing (Melt) Temp	--	209 to 250	°C
Mold Temperature	--	20 to 48	°C
Injection Pressure	--	4.41 to 88.1	MPa



Injection	Hostalen PP H1022	Generic PP Impact Copolymer	Unit
Holding Pressure	--	34.2 to 35.0	MPa

Injection Notes

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Extrusion	Hostalen PP H1022	Generic PP Impact Copolymer	Unit
Drying Temperature	--	80 to 90	°C
Drying Time	--	3.0	hr
Melt Temperature	--	195 to 221	°C

Extrusion Notes

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Notes

- ¹ These links provide you with access to supplier literature. We work hard to keep them up to date; however you may find the most current literature from the supplier.
- ² Typical properties: these are not to be construed as specifications.

