

Generic PP Copolymer

Polypropylene Copolymer

Generic

Message:

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General Information			
Physical	Nominal Value	Unit	Test Method
Specific Gravity			
--	0.890 - 0.912	g/cm ³	ASTM D792
23°C	0.885 - 0.948	g/cm ³	ISO 1183
--	0.896 - 0.901	g/cm ³	ASTM D1505
Melt Mass-Flow Rate (MFR)			
230°C/2.16 kg	0.30 - 30	g/10 min	ASTM D1238
230°C/2.16 kg	0.28 - 30	g/10 min	ISO 1133
Melt Volume-Flow Rate (MVR) (230°C/2.16 kg)	2.00 - 55.1	cm ³ /10min	ISO 1133
Molding Shrinkage			
Flow: 23°C	1.1 - 1.9	%	ASTM D955
Transverse flow: 23°C	1.4 - 2.3	%	ASTM D955
23°C	1.1 - 1.8	%	ISO 294-4
Water Absorption			
23°C, 24 hr	0.010 - 0.021	%	ASTM D570
23°C, 24 hr	0.046 - 0.21	%	ISO 62
Saturated, 23°C	0.020	%	ISO 62
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness			
23°C	63 - 106		ASTM D785
23°C	86 - 96		ISO 2039-2
Durometer Hardness			
23°C	60 - 74		ASTM D2240
23°C	58 - 70		ISO 868
Ball Indentation Hardness	43.6 - 70.0	MPa	ISO 2039-1
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus			
23°C	709 - 1720	MPa	ASTM D638
23°C	981 - 1620	MPa	ISO 527-2
Tensile Strength			
Yield, 23°C	19.6 - 28.1	MPa	ASTM D638
Yield, 23°C	17.9 - 30.6	MPa	ISO 527-2

Fracture, 23°C	12.6 - 30.2	MPa	ASTM D638
Fracture, 23°C	10.0 - 31.3	MPa	ISO 527-2
23°C	16.1 - 30.3	MPa	ASTM D638
Tensile Elongation			
Yield, 23°C	4.0 - 16	%	ASTM D638
Yield, 23°C	1.0 - 13	%	ISO 527-2
Fracture, 23°C	2.0 - 510	%	ASTM D638
Fracture, 23°C	3.3 - 410	%	ISO 527-2
Flexural Modulus			
23°C	791 - 1480	MPa	ASTM D790
23°C	817 - 1510	MPa	ISO 178
Flexural Strength			
23°C	20.7 - 50.6	MPa	ASTM D790
23°C	17.9 - 40.1	MPa	ISO 178
Yield, 23°C	25.2 - 35.9	MPa	ASTM D790
Films	Nominal Value	Unit	Test Method
Tensile Modulus (23°C)	447 - 555	MPa	ISO 527-3
Tensile Strength (23°C)	29.0 - 50.4	MPa	ISO 527-3
Tensile Elongation (Break, 23°C)	590 - 750	%	ISO 527-3
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength (23°C)	2.5 - 51	kJ/m ²	ISO 179
Charpy Unnotched Impact Strength (23°C)	5.0 - 81	kJ/m ²	ISO 179
Notched Izod Impact			
23°C	8.0 - 140	J/m	ASTM D256
23°C	3.0 - 52	kJ/m ²	ISO 180
Unnotched Izod Impact (23°C)	4.5 - 1500	J/m	ASTM D256
Dart Drop Impact (23°C)	2.71 - 40.0	J	ASTM D3029
Dart Drop Impact (23°C)	17.8 - 36.2	J	ASTM D5420
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			
0.45 MPa, not annealed	78.4 - 131	°C	ASTM D648
0.45 MPa, not annealed	72.8 - 115	°C	ISO 75-2/B
1.8 MPa, not annealed	42.9 - 61.8	°C	ASTM D648
1.8 MPa, not annealed	44.0 - 58.0	°C	ISO 75-2/A
Brittleness Temperature	-45.0 - -5.00	°C	ASTM D746
Vicat Softening Temperature			
--	134 - 157	°C	ASTM D1525
--	53.6 - 153	°C	ISO 306
Melting Temperature			
--	162 - 167	°C	ISO 11357-3
--	165 - 168	°C	ASTM D3418
--	160 - 165	°C	ISO 3146

CLTE - Flow	8.7E-5 - 1.6E-4	cm/cm/°C	ASTM D696
RTI Elec	65.0 - 66.5	°C	UL 746
RTI Imp	65.0 - 66.4	°C	UL 746
RTI	65.0 - 66.4	°C	UL 746
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity			
--	80 - 2.5E+13	ohms	ASTM D257
--	1.0E+2 - 1.0E+15	ohms	IEC 60093
Volume Resistivity			
23°C	50 - 1.3E+16	ohms·cm	ASTM D257
23°C	20 - 2.5E+17	ohms·cm	IEC 60093
Dielectric Strength (23°C)	39 - 40	kV/mm	ASTM D149
Arc Resistance	130 - 131	sec	ASTM D495
Comparative Tracking Index	594 - 600	V	IEC 60112
Flammability	Nominal Value	Unit	Test Method
Burning Rate	0.0 - 100	mm/min	ISO 3795
Glow Wire Flammability Index	950 - 960	°C	IEC 60695-2-12
Glow Wire Ignition Temperature	694 - 960	°C	IEC 60695-2-13
Oxygen Index	21 - 30	%	ASTM D2863
Optical	Nominal Value	Unit	Test Method
Gloss	3 - 130		ASTM D2457
Haze	0.30 - 41	%	ASTM D1003
Injection	Nominal Value	Unit	
Drying Temperature	73.8 - 90.9	°C	
Drying Time	1.0 - 3.0	hr	
Suggested Max Moisture	0.050 - 0.21	%	
Suggested Max Regrind	53	%	
Rear Temperature	178 - 222	°C	
Middle Temperature	190 - 228	°C	
Front Temperature	190 - 234	°C	
Nozzle Temperature	203 - 238	°C	
Processing (Melt) Temp	194 - 245	°C	
Mold Temperature	20.0 - 62.0	°C	
Injection Pressure	4.05 - 101	MPa	
Holding Pressure	4.63 - 53.9	MPa	
Back Pressure	0.188 - 0.750	MPa	
Screw Speed	49 - 77	rpm	
Clamp Tonnage	0.98 - 4.5	kN/cm ²	
Cushion	4.76 - 9.53	mm	
Injection instructions			

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Extrusion	Nominal Value	Unit
Drying Temperature	79.9 - 80.6	°C
Drying Time	1.5 - 3.0	hr
Suggested Max Moisture	0.066 - 0.083	%
Cylinder Zone 1 Temp.	194 - 210	°C
Cylinder Zone 2 Temp.	200 - 210	°C
Cylinder Zone 3 Temp.	200 - 211	°C
Cylinder Zone 4 Temp.	200 - 211	°C
Cylinder Zone 5 Temp.	209 - 211	°C
Melt Temperature	195 - 222	°C
Die Temperature	200 - 215	°C

Extrusion instructions

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