

Consumer rigid packaging (HDPE)

Small blow molding

PROPERTIES	PHYSICAL			MECHANICAL								SPECIFIC CHARACTERISTICS AND TYPICAL CUSTOMER APPLICATIONS
	Density 23°C	Melt Flow Rate		Tensile Modulus	Tensile Stress at Yield	Tensile Strain at Yield	Tensile Impact Strength; notched	Charpy Impact Strength; notched	Ball indentation hardness (H132/30)	ESCR (FNCT)		
		190°C, 2.16kg	190°C, 5kg				-30°C	-30°C		6 MPa, 50°C, 2% Arkopal	6 MPa, 50°C, 6.6% Dehyton PL	
Test Method	ISO 1183-1	ISO 1133-1		ISO 527-1, -2			ISO 8256/1A	ISO 179-1/1eA	ISO 2039-1	ISO 16770		
Unit	g/cm³	g/10 min		MPa	MPa	%	kJ/m²	kJ/m²	MPa	h		
High Density Polyethylene												
Lupolen 5021DX	0.950	0.25	1.0	1000	25	9	100	6.0	45	20	20	Good ESCR; good chemical resistance; good impact resistance; good organoleptic properties.; engineering parts, toys, packaging for surfactants, consumer goods; packaging of dangerous goods
Hostalen GF 4750	0.950	0.4	1.5	1000	23	10	80	5.5	44	36	43	High ESCR; packaging of surfactants, consumer goods; packaging of dangerous goods
Hostalen ACP 5231 D	0.952	0.3	1.2	1100	25	8	75	6.0	51	70	100	Very high ESCR balanced with good stiffness. Packaging for detergents and personal care, engineering parts, toys; packaging of packaging of dangerous goods
Hostalen ACP 5831 D	0.958	0.3	1.2	1350	28	7	75	6.5	60	20	20	Excellent balance of high stiffness and high ESCR; high rigidity; toys, packaging of consumer goods
Hostalen ACP 6031 D	0.960	0.35	1.2	1420	30	7	65	6.0	63	14	12	Excellent balance of highest stiffness and good ESCR; very high rigidity; packaging of consumer goods
High Density Polyethylene - CirculenRecover												
CirculenRecover HD5603 Ivory	0.956	0.3	1.5	1200	24	9	-	2.5	-	8	-	HDPE containing at least 98% post consumer material.* Supplied in pellet form. General purpose grade for blow molding and compression molding. Blow molded bottles up to 5 liters for household, industrial chemicals and other blow molded articles. Not intended for higher regulated applications like food. - Good colorability
CirculenRecover HD5603 Ivory Plus	0.956	0.3	1.5	1200	24	9	-	2.5	-	8	-	HDPE containing at least 98% post consumer material.* Supplied in pellet form. General purpose grade for blow molding and compression molding. Blow molded bottles up to 5 liters for personal care, house- hold, industrial chemicals and other blow molded articles. Not intended for higher regulated applications like food. - Low residual odor - Good colorability
CirculenRecover HD5603 Silver	0.956	0.4	1.8	1200	24	9	-	2.5	-	8	-	HDPE containing at least 98% post consumer material.* Supplied in pellet form. General purpose grade for blow molding and compression molding. Blow molded bottles up to 5 liters for household, industrial chemicals and other blow molded articles. Not intended for higher regulated applications like food.
CirculenRecover HD5603 Silver Plus	0.956	0.4	1.8	1200	24	9	-	2.5	-	8	-	HDPE containing at least 98% post consumer material.* Supplied in pellet form. General purpose grade for blow molding and compression molding. Blow molded bottles up to 5 liters for personal care, household, industrial chemicals and other blow molded articles. Not intended for higher regulated applications like food. - Low residual odor

These are typical property values not to be construed as specification limits. ESCR = Environmental Stress Crack Resistance; FNCT = Full Notch Creep Test
CirculenRecover grades: Density measured on Injection Molding specimens

* Recycled material fully based on post consumer waste (PCW) from pre-sorted municipal plastic waste.

Consumer rigid packaging (PP)

Small blow molding

PROPERTIES	PHYSICAL		MECHANICAL						OPTICAL	SPECIFIC CHARACTERISTICS AND TYPICAL CUSTOMER APPLICATIONS
	Density 23°C	Melt Flow Rate	Tensile Modulus	Tensile Stress at Yield	Tensile Strain at Yield	Charpy Impact Strength; notched		Ball indentation hardness (H132/30)	Haze (1mm)	
		230°C, 2.16 kg				23°C	0°C			
Test Method	ISO 1183	ISO 1133	ISO 527			ISO 179-1/1eA		ISO 2039-1	ASTM D1003	
Unit	g/cm³	g/10 min	MPa	MPa	%	kJ/m²		MPa	%	
PP Homopolymer										
Moplen HP501H	0.9	2.1	1450	33	9	8	-	72	-	Good stiffness/ impact balance, crack resistance, UL listed,; closures, housewares
PP Random Copolymer										
Moplen RP210G	0.9	1.8	950	25	14	12	3.5	-	-	Good processability, crack resistance, EBM and IBM bottles for cosmetics, food and household chemicals
Moplen RP241H	0.9	1.8	900	24	14	35	4.0	45	9	NU; high transparency and impact strength; bottles for food, detergents, household chemicals
Moplen RP340H	0.9	1.8	1100	30	13	25	2.5	56	11	NU; high transparency and stiffness; EBM and IBM bottles for food, household chemicals and cosmetics
Moplen RP390H	0.9	1.8	1050	29	13	26	3.5	56	15	NU; superior processability; excellent transparency, gloss. Bottles for food, household chemicals and cosmetics
Moplen RP340N	0.9	11	1150	30	14	6	2.0	48	9	NU; high transparency, gloss and stiffness; suitable for ISBM bottles, hinged closures , and housewares
PP Heterophasic Copolymer										
Moplen EP 440G	0.9	1.3	1400	27	8	40	10.0	48	-	Nucleated; High stiffness, very high impact strength at room and sub-zero temp.; good dimensional stability and excellent creep resistance
Specialties: Modifiers										
Koattro KT MR05	0.87	1.3	-	-	-	No break	No break	-	-	Enhanced softness, elastic recovery, impact strength, stress whitening whilst improving transparency

These are typical property values not to be construed as specification limits. ISBM = Injection Stretch Blow Molding; NU = Nucleated

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