

PP CirculenRecover Grades Used in Blow Molding / Consumer Rigid Packaging

PROPERTIES		MFR 230°C, 2.16kg	Density 23 °C	MECHANICAL					ADDITIONAL INFORMATION		
				Tensile Modulus	Tensile Stress at Yield	Tensile Elongation at Break	Charpy impact notched		% Recyclate	Source	Restriction
Test Method		ISO 1133-1	ISO 1183	ISO 527	ISO 527	ISO 527	23°C	-20°C			
Unit		g/10 min	g/cm ³	MPa	MPa	%	kJ/m ²				
GRADE NAME											
Polypropylene Grey / Ivory											
CirculenRecover	PP300P Grey	16	0.915	1300	27	40	5.0	-	> 99%	PCW	See disclaimer below
CirculenRecover	PP300P Ivory	16	0.915	1300	27	40	5.0	-	> 99%	PCW	See disclaimer below
CirculenRecover	PP300R Grey	21	0.915	1250	26	30	5.0	-	> 99%	PCW	See disclaimer below
CirculenRecover	PP300R Ivory	21	0.915	1250	26	30	5.0	-	> 99%	PCW	See disclaimer below
CirculenRecover	PP300S Grey	35	0.915	1250	26	25	4.5	-	> 98%	PCW	See disclaimer below
CirculenRecover	PP300S Ivory	35	0.915	1250	26	25	4.5	-	> 98%	PCW	See disclaimer below
CirculenRecover	PP300T Grey	50	0.915	1200	26	20	4.5	-	> 98%	PCW	See disclaimer below
CirculenRecover	PP300T Ivory	50	0.915	1200	26	20	4.5	-	> 98%	PCW	See disclaimer below
CirculenRecover	PP300U Grey	70	0.915	1200	26	10	4.0	-	> 98%	PCW	See disclaimer below
CirculenRecover	PP300U Ivory	70	0.915	1200	26	10	4.0	-	> 98%	PCW	See disclaimer below
Polypropylene Impact Grey / Ivory											
CirculenRecover	PP189P Ivory	15	0.918	800	19	> 50	> 30	> 7	> 85%	PCW	See disclaimer below
CirculenRecover	PP249S Grey	28	0.922	850	15	> 50	> 40	> 6	> 70%	PCW	See disclaimer below
CirculenRecover	PP249S Ivory	28	0.922	850	15	> 50	> 40	> 6	> 70%	PCW	See disclaimer below

*Restrictions: this product is not intended for highly regulated applications including food contact, potable water contact, medical and pharmaceutical applications.

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HDPE *Circulen*Recover Grades Used in Blow Molding / Consumer Rigid Packaging

PROPERTIES	PHYSICAL			MECHANICAL						ESCR (FNCT)		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)	6 MPa, 50°C, 2% Arkopal	3.5 MPa, 80°C, 2% Arkopal	
		190°C, 2.16kg	190°C, 5kg				-30°C	-30°C				
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/cm ³	g/10 min		MPa	MPa	%	kJ/m ²	kJ/m ²	MPa	h		
High Density Polyethylene - <i>Circulen</i>Recover												
<i>Circulen</i> Recover 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
<i>Circulen</i> Recover 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, household, industrial chemicals and other blow molded articles. Not intended for higher regulated applications like food. - Low residual odor - Good colorability
<i>Circulen</i> Recover 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.
<i>Circulen</i> Recover 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
*Circulen*Recover grades: Density measured on IM specimens

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

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