

Polypropylene Consumer and Injection Molding

Containers, Crates, Garden Furniture, Housewares, Luggage, TSL, TWIM

TYPICAL PROPERTIES			MECHANICAL						THERMAL				OPTICAL	TYPICAL APPLICATIONS	SPECIFIC CHARACTERISTICS	
	Density	MFR 230°C, 2,16kg	Tensile Modulus	Tensile Stress at Yield	Tensile Elongation		Charpy Impact Notched			Ductile/Brittle Transition Temp.	Heat Deflection Temp. HDT/B	Vicat Softening Temp.				Haze 1mm
	23°C				at Yield	at Break	23 °C	0 °C	-20 °C			10N	50N			
Test Method	ISO 1183	ISO 1133-1	ISO 527	ISO 527	ISO 527	ISO 179/1eA			ISO 6603-2	0,45 MPa ISO 75-2	ISO 306/A50	ISO 306/B50	ASTM D1003			
Units	g/cm ³	g/10 min	MPa	MPa	%	kJ/m ²			°C	°C	°C		%			
GRADE NAME																
PP HOMOPOLYMER, <i>Moplen</i>																
<i>Moplen</i> HP500N	0.9	12	1400	35	10	>50	4				95	153	85		General purpose	Good flow with high stiffness, good creep resistance
<i>Moplen</i> HP400R	0.9	25	1350	32	10	>50	3				90	154	85		Garden furniture, housewares	High fluidity with good stiffness.
<i>Moplen</i> HP548R	0.9	23	1600	35	8	>50	2.7				95	154	94		Garden furniture, housewares	NU and AS.
<i>Moplen</i> HP648T	0.9	53	1600	35	8	>50	2				95	154	95		TWIM, housewares	NU and AS, high flow
PP RANDOM COPOLYMER, <i>Moplen</i>																
<i>Moplen</i> RP348R	0.9	25	1150	30	14	>50	6	2			80	130	72	9	TWIM, housewares, caps	NU and AS, high transparency and gloss
<i>Moplen</i> RP248R	0.9	30	900	22	10	>50	6.5	3.5			60	120	60	10	TWIM, housewares, TSL	NU and AS, high transparency and gloss
<i>Moplen</i> RP398T	0.9	40	1100	20	14	>50	5	2.5			70	127	70	9	TWIM, housewares, TSL	NU and AS, odorless, high transparency and gloss
<i>Moplen</i> RP390T	0.9	40	1100	28	14	>50	5	2.5			70	127	70	9	Co-Injection molding, TWIM, housewares	NU, odorless, high transparency and gloss
<i>Moplen</i> RP348T HP	0.9	48	1100	29	11	>50	4.5	2.5			70	130	72	9	TWIM, housewares, TSL	NU and AS, high transparency and gloss
<i>Moplen</i> RP248U	0.9	60	910	25	14	>50	5.9	2.5			69	125		11	TWIM, transparent housewares, TSL	NU and AS, excellent impact / aesthetics balance, high transparency, high flow
<i>Moplen</i> RP398U	0.9	71	1030	30	14	>50	5	1.5			70	130		11	Transparent packaging, housewares, TSL	NU and AS, odorless, high transparency and gloss, high flow
<i>Moplen</i> RP348U	0.9	75	1100	28	13	>50	4.5	1.5			80	130	72	11	TWIM, housewares, TSL	NU and AS, high transparency and gloss, high flow
<i>Moplen</i> RP398V	0.9	100	950	26	26	>50	5	2.5			70	127		10	Transparent packaging, reusable containers, housewares, TSL	NU and AS, high transparency and gloss, very high flow

Legend: NA=Not Applicable; NU=Nucleated; AS=Antistatic;
TWIM=Thin Wall Injection Molding; TSL=Toys,Sports and Leisure;
NB=No Break; IMR=Inter Material Replacement

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TYPICAL PROPERTIES		MECHANICAL								THERMAL				OPTICAL	TYPICAL APPLICATIONS	SPECIFIC CHARACTERISTICS
Density	MFR 230°C, 2,16kg	Tensile Modulus	Tensile Stress at Yield	Tensile Elongation		Charpy Impact Notched			Ductile/Brittle Transition Temp.	Heat Deflection Temp. HDT/B	Vicat Softening Temp.		Haze 1mm			
				at Yield	at Break	23 °C	0 °C	-20 °C			10N	50N				
Test Method	ISO 1183	ISO 1133-1	ISO 527	ISO 527	ISO 527	ISO 179/1eA			ISO 6603-2	0,45 MPa ISO 75-2	ISO 306/A50	ISO 306/B50	ASTM D1003			
Units	g/cm ³	g/10 min	MPa	MPa	%	kJ/m ²			°C	°C	°C		%			
GRADE NAME																
PP HETEROPHASIC COPOLYMER, <i>Moplen</i>																
<i>Moplen</i> EP440G	0.9	1.3	1450	27	8	>50	40	10	7	<-50	78	150	66	Opaque	Luggage, TSL, crates	NU, excellent mechanical balance, excellent creep resistance
<i>Moplen</i> EP400H	0.9	1.7	1300	27	8	>50	30	10	7	<-50	78	153	70	Opaque	Luggage, TSL, crates	Excellent mechanical balance, excellent creep resistance
<i>Moplen</i> EP240H	0.9	2	1000	23	8	>50	80	12	8	<-50	75	148		Opaque	Crates	NU, excellent low temperature impact
<i>Moplen</i> EP340K	0.9	4	1100	20	5	>50	66	13	7	<-50	85	140		Opaque	Luggage, TSL, crates	NU, high impact
<i>Moplen</i> EP300K	0.9	4	1200	27	9	>50	13	5.5	4.5	-47	75	150		Opaque	Crates	Good impact
<i>Moplen</i> EP340M	0.9	7.5	1050	21	6	>50	45	9	7	<-50	80	144		Opaque	Luggage, TSL, crates	NU, high impact
<i>Moplen</i> EP540N	0.9	12	1500	28	5	>50	7	5	4		100	151		Opaque	Housewares, caps, TSL	NU
<i>Moplen</i> EP549P	0.9	15	1450				9	6.5	5.5	<-50				Opaque	Crates, hosewares	NU and AS, good stiffness/impact balance
<i>Moplen</i> EP240P	0.9	15	950	20	7	>50	20	9	5	<-50	78	142		Opaque	TWIM, TSL	NU, excellent low temperature impact
<i>Moplen</i> EP540P	0.9	15	1300	28	6	>50	7	4.5	3	-45	90	151		Opaque	Luggage, housewares, containers	NU, good stiffness/Impact balance
<i>Moplen</i> EP548P	0.9	16	1400	28	7	>50	8	6	3	-45	100	147	70	Opaque	TWIM, housewares, large to medium containers, crates	NU and AS, good stiffness/impact balance
<i>Moplen</i> EP548R	0.9	21	1500	27	5	>50	6	4.5	4	<-50				Opaque	TWIM, housewares, TSL	NU and AS, good stiffness/impact balance
<i>Moplen</i> EP249R	0.9	25	950				20	10	8	<-51				Opaque	Containers, crates	NU, high impact

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Density	MFR 230°C, 2,16kg	Tensile Modulus	Tensile Stress at Yield	Tensile Elongation		Charpy Impact Notched			Ductile/Brittle Transition Temp.	Heat Deflection Temp. HDT/B	Vicat Softening Temp.		Haze 1mm			
				at Yield	at Break	23 °C	0 °C	-20 °C			10N	50N				
Test Method	ISO 1183	ISO 1133-1	ISO 527	ISO 527	ISO 527	ISO 179/1eA			ISO 6603-2	0,45 MPa ISO 75-2	ISO 306/A50	ISO 306/B50	ASTM D1003			
Units	g/cm ³	g/10 min	MPa	MPa	%	kJ/m ²			°C	°C	°C		%			
GRADE NAME																
PP HETEROPHASIC COPOLYMER, <i>Moplen</i>																
<i>Moplen</i> EP448S	0.9	44	1400	27	5	>51	6	4	3	<-50	100	150		Opaque	Containers, housewares, toys, furniture, crates, pails	NU and AS, odorless, good stiffness/impact balance
<i>Moplen</i> EP548S	0.9	44	1550	28	5	30	5	3.5	3	<-50	95	151		Opaque	TWIM, housewares, TSL	NU and AS, good stiffness/impact balance
<i>Moplen</i> EP240T	0.9	48	950	19	5	>50	10	7	4		78	142		Opaque	TWIM, housewares	NU, high impact
<i>Moplen</i> EP448T	0.9	48	1250	27	5	40	5	3.5	2.5		90	151		Opaque	TWIM, housewares	NU and AS, good stiffness/impact balance
<i>Moplen</i> EP548T	0.9	48	1350	29	5	>50	4	2.5	2		98	152		Opaque	TWIM	NU and AS
<i>Moplen</i> EP348U	0.9	70	1200	24	4	30	5.5	4	3.2	-45	92	150	65	Opaque	TWIM, housewares	NU and AS, high flow, good impact
<i>Moplen</i> EP548U	0.9	70	1450	28	5	30	4	3.5	3	<-50	95	151		Opaque	TWIM, housewares	NU and AS, high flow
<i>Moplen</i> EP549U	0.9	70	1260	23	4	20	9	6	5	-45	98	147		Opaque	Packaging, housewares	NU and AS, Excellent impact/stiffness balance and fluidity
<i>Moplen</i> EP548V	0.9	100	1450	28	5	10	3.5	2.5	2	-45	90	152		Opaque	TWIM, housewares,TSL	NU and AS, very high flow
<i>Moplen</i> EP648V	0.9	100	1600	30	4	10	3.5	2	1		100	154		Opaque	TWIM, housewares	NU and AS,high rigidity, very high flow

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Containers, Crates, Garden Furniture, Housewares, Luggage, TSL, TWIM



TYPICAL PROPERTIES			MECHANICAL						THERMAL				OPTICAL	TYPICAL APPLICATIONS	SPECIFIC CHARACTERISTICS	
	Density	MFR 230°C, 2,16kg	Tensile Modulus	Tensile Stress at Yield	Tensile Elongation		Charpy Impact Notched			Ductile/Brittle Transition Temp.	Heat Deflection Temp. HDT/B	Vicat Softening Temp.				Haze 1mm
	23°C				at Yield	at Break	23 °C	0 °C	-20 °C			10N	50N			
Test Method	ISO 1183	ISO 1133-1	ISO 527	ISO 527	ISO 527		ISO 179/1eA			ISO 6603-2	0,45 MPa ISO 75-2	ISO 306/A50	ISO 306/B50	ASTM D1003		
Units	g/cm ³	g/10 min	MPa	MPa	%		kJ/m ²			°C	°C	°C		%		
GRADE NAME																
Clyrell																
Clyrell EC348P	0.9	14	1200	28	13	>50	5	2	1	-5	75	128		15	Transparent shock resistant food/non food containers, housewares	NU, high gloss
Clyrell EC340Q	0.9	20	1150	23	13	>50	22	5.5	4	-46	88	127		38	TWIM,TSL	NU, high gloss
Clyrell EC340R	0.9	26	1180	23	12	>50	6.5	3.5	2	-48	90	123		32	Food containers	NU, good impact and low stress whitening
Clyrell EC140R	0.9	30	900	20	18	>50	10	6	4	-50	60	114		20	Food containers	NU, very high impact, high flow, low stress whitening
Clyrell EC390T	0.9	45	1150	23	13	>50	6	4	3	<-50				30	Food containers	NU, good impact and low stress whitening
Clyrell RC449S	0.9	40	1250	30	11	>50	4.2	1.5			75			5.5	Transparent food packaging, housewares, consumer goods, cosmetics	NU, AS, excellent transparency and gloss, improved stiffness with good impact, very good organoleptic
Clyrell RC549S	0.9	40	1470	34	10	>50	3	1.2			86			10	Transparent food packaging, transparent drinking cups, housewares, consumer goods, cosmetics	NU, AS, very high stiffness, very good transparency, gloss and organoleptic
HOMOPOLYMER-Adstif																
Adstif HA840R	0.9	20	2300	41	6	12	2				110	158		50	TWIM, garden furniture	NU, good dimensional stability at high temperature
PP HETEROPHASIC COPOLYMER-Adstif																
Adstif EA648P	0.9	18	1700	32	5	50	6.5	3	2.5		100	153		Opaque	TWIM, dairy products, housewares	NU, AS, High crystallinity
Adflex																
Adflex C200F	0.88	6	200	8	30	600	NB	80	65	<-50	41	80	-	48	Containers, housewares	Soft touch, impact modifier for transparent applications
Adflex X500F	0.89	7.5	550	14	20	700	NB	79	45	<-50	58	94	-	23	Containers, housewares	Impact modifier for transparent applications, low temperature exposure
Adflex X100G	0.88	8	80	NA	NA	450	NB	NB	NB	<-50	40	56	-	-	Containers, housewares	Soft touch, impact modifier for higher melt flow rate
Adflex Z101H	0.88	27	80	NA	NA	400	NB	NB	92	<-50	40	55	-	-	Containers, housewares	Soft touch, impact modifier for higher melt flow rate

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Quality Circular Polymers

Containers, Crates, Garden Furniture, Luggage, TWIM



TYPICAL PROPERTIES		MECHANICAL						ADDITIONAL INFO			TYPICAL APPLICATIONS	SPECIFIC CHARACTERISTICS			
		Density	MFR 230°C, 2,16kg	Tensile Modulus	Tensile Stress at Yield	Tensile Elongation at Break	Flexural Modulus	Charpy Impact Notched							
		23 °C					23 °C	0 °C	-20 °C	COLOR	RECYCLED PC %	RESTRICTION			
Test Method		ISO 1183	ISO 1133-1	ISO 527	ISO 527	ISO 527	ISO 179/1eA								
Units		g/cm ³	g/10 min	MPa	MPa	%	kJ/m ²								
PP HETEROPHASIC COPOLYMER, QCP															
Moplen	QCP840P	1,050	12	2250	27	60	2100	4.0			Grey	>75%	See disclaimer below	Containers, crates, furniture, pails, bin dividers	High stiffness, 20% Talc filled
Moplen	QCP840P Black	1,060	14	2300	27	15	2300	4.0			Black	>75%	See disclaimer below	Containers, crates, furniture, pails, bin dividers	High stiffness, 20% Talc filled
Moplen	QCP249P	0.935	15	1100	22	150	1090	10.5			Grey	>80%	See disclaimer below	Containers, crates, furniture, pails, baby strollers	NU, High impact resistance
Moplen	QCP249P Ivory	0.935	15	1100	22	150	1090	10.5			Ivory	>80%	See disclaimer below	Containers, crates, furniture, pails	NU, High impact resistance
Moplen	QCP249P Black	0.935	15	1100	22	150	1090	10.5			Black	>80%	See disclaimer below	Containers, crates, furniture, pails, baby strollers	NU, High impact resistance
Moplen	QCP189P	0.918	15	800	19	30	800	30	>7		Grey	>85%	See disclaimer below	High impact containers, luggage, furniture	AS, Very high impact even at low temperature
Moplen	QCP300P	0.915	16	1300	27	40	1200	6.5			Grey	>95%	See disclaimer below	Containers, pails, crates, furniture, caps	Medium fluidity
Moplen	QCP300P Ivory	0.915	16	1300	27	40	1200	6.5			Ivory	>95%	See disclaimer below	Containers, pails, crates, furniture, caps	
Moplen	QCP300P Black	0.917	16	1200	27	50	1150	6.0			Black	>95%	See disclaimer below	Containers, pails, crates, furniture, caps	Medium fluidity
Moplen	QCP300R	0.915	21	1250	26	30	1150	6.5			Grey	>95%	See disclaimer below	Containers, pails, crates, furniture, caps	Medium fluidity
Moplen	QCP300R Ivory	0.915	21	1250	26	30	1150	6.5			Ivory	>95%	See disclaimer below	Containers, pails, crates, furniture, caps	
Moplen	QCP300R Black	0.914	20	1200	27	25	1150	5.5			Black	>95%	See disclaimer below	Containers, pails, crates, furniture, caps	Medium fluidity
Moplen	QCP300S	0.915	35	1150	26	25	1100	6.0			Grey	>95%	See disclaimer below	Crates, boxes, pallets, pails, compounds, caps	Good fluidity
Moplen	QCP300S Ivory	0.915	35	1150	26	25	1100	6.0			Grey	>95%	See disclaimer below	Crates, boxes, pallets, pails, compounds, caps	Good fluidity
Moplen	QCP300S Black	0.916	35	1150	26	25	1050	6.0			Black	>95%	See disclaimer below	Crates, boxes, pallets, pails, compounds, caps	Good fluidity
Moplen	QCP540S	0.950	35	1400	24	25	1300	6.0			Grey	>85%	See disclaimer below	Crates, boxes, pallets, pails, compounds, caps	NU, Good fluidity
Moplen	QCP540S Black	0.950	35	1400	24	25	1300	6.0			Black	>85%	See disclaimer below	Crates, boxes, pallets, pails, compounds, caps	NU, Good fluidity
Moplen	QCP840S	1,050	40	2075	25	<10	2180	3.0			Grey	>75%	See disclaimer below	High stiffness containers	Good fluidity, high stiffness, 20% Talc filled
Moplen	QCP840S Black	1,050	40	2075	25	<10	2180	3.0			Black	>75%	See disclaimer below	High stiffness containers	Good fluidity, high stiffness, 20% Talc filled
Moplen	QCP300T	0.915	50	1150	26	20	1100	6.0			Grey	>95%	See disclaimer below	Large containers, boxes, compounds	High fluidity
Moplen	QCP300T Black	0.915	50	1150	26	20	1100	6.0			Black	>95%	See disclaimer below	Large containers, boxes, compounds	High fluidity
Moplen	QCP300U	0.915	70	1250	26	10	1150	5.0			Grey	>95%	See disclaimer below	Large containers, boxes, DVD boxes, compounds	Very high fluidity
Moplen	QCP300U Ivory	0.915	70	1250	26	10	1150	5.0			Ivory	>95%	See disclaimer below	Large containers, boxes, DVD boxes, compounds	Very high fluidity
Moplen	QCP300U Black	0.915	70	1150	25	10	1050	4.5			Black	>95%	See disclaimer below	Large containers, boxes, DVD boxes, compounds	Very high fluidity

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

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