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



TYPICAL PROPERTIES					MEG	CHANICAL	-			THERM	IAL		OPTICAL		
	Density	MFR	Tensile	Tensile	Tensile El	ongation	Charpy Ir	npact Notched	Ductile/Brittle		Vicat Soft	ening Temp.	Haze		
	23°C	230°C, 2,16kg	Modulus	Stress at Yield	at Yield at Break		23 °C	0 °C -20 °C	Transition Temp.	Deflection Temp. HDT/B	10N	10N 50N		TYPICAL	SPECIFIC CHARACTERISTICS
Test Method	ISO 1183	ISO 1133-1	ISO 527	ISO 527			ISO 179/1eA		ISO 6603-2	0,45 MPa ISO 75-2	ISO 306/A50	ISO 0 306/B50	ASTM D1003	APPLICATIONS	
Units	g/cm³	g/10 min	MPa	MPa	%	,		kJ/m²	°C	°C	°C		%		
GRADE NAME															
PP HOMOPOLYMER, Mop	olen														
Moplen HP500N	0.9	12	1400	35	10	>50	4			95	153	85		General purpose	Good flow with high stiffness, good creep resistance
Moplen HP400R	0.9	25	1350	32	10	>50	3			90	154	85		Garden furniture, housewares	High fluidity with good stiffness.
Moplen HP548R	0.9	23	1600	35	8	>50	2.7			95	154	94		Garden furniture, housewares	NU and AS.
Moplen HP648T	0.9	53	1600	35	8	>50	2			95	154	95		TWIM, housewares	NU and AS, high flow
PP RANDOM COPOLYME	R, Moplen	<u> </u>					1								
Moplen RP348R	0.9	25	1150	30	14	>50	6	2		80	130	72	9	TWIM, housewares, caps	NU and AS, high transparency and gloss
Moplen 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
Moplen 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
Moplen 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
Moplen 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
Moplen 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
Moplen 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
Moplen 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
Moplen 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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Containers, Crates, Garden Furniture, Housewares, Luggage, TSL, TWIM



TYPICAL PROPERTIES					ME	CHANICAL					THERM	1AL		OPTICAL		
	Density	MFR	Tensile	Tensile	Tensile E	longation	Charp	y Impact N	Notched	Ductile/Brittle		Vicat Soft	ening Temp.	Haze		
	23°C	230°C, 2,16kg	Modulus	Stress at Yield	at Yield	at Break	23 °C	0 °C	-20 °C	Transition Temp.	Deflection Temp. HDT/B	10N	50N	1mm	TYPICAL APPLICATIONS	SPECIFIC
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	APPLICATIONS	CHARACTERISTICS
Units	g/cm³	g/10 min	MPa	MPa	9	%	kJ/m²		°C	°C	°C		%			
GRADE NAME																
PP HETEROPHASIC CO	POLYMER, Mo	plen														
Moplen 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
Moplen 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
Moplen EP240H	0.9	2	1000	23	8	>50	80	12	8	<-50	75	148		Opaque	Crates	NU, excellent low temperature impact
Moplen EP340K	0.9	4	1100	20	5	>50	66	13	7	<-50	85	140		Opaque	Luggage, TSL, crates	NU, high impact
Moplen EP300K	0.9	4	1200	27	9	>50	13	5.5	4.5	-47	75	150		Opaque	Crates	Good impact
Moplen EP340M	0.9	7.5	1050	21	6	>50	45	9	7	<-50	80	144		Opaque	Luggage, TSL, crates	NU, high impact
Moplen EP540N	0.9	12	1500	28	5	>50	7	5	4		100	151		Opaque	Housewares, caps, TSL	NU
Moplen EP549P	0.9	15	1450				9	6.5	5.5	<-50				Opaque	Crates, hosewares	NU and AS, good stiffness/ impact balance
Moplen EP240P	0.9	15	950	20	7	>50	20	9	5	<-50	78	142		Opaque	TWIM, TSL	NU, excellent low temperature impact
Moplen EP540P	0.9	15	1300	28	6	>50	7	4.5	3	-45	90	151		Opaque	Luggage, housewares, containers	NU, good stiffness/Impact balance
Moplen 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
Moplen EP548R	0.9	21	1500	27	5	>50	6	4.5	4	<-50				Opaque	TWIM, housewares, TSL	NU and AS, good stiffness/ impact balance
Moplen EP249R	0.9	25	950				20	10	8	<-51				Opaque	Containers, crates	NU, high impact

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



TYPICAL PROPERTIES					ME	CHANICAI	L				THERM	IAL		OPTICAL		
	Density	MFR	Tensile	Tensile	Tensile El	Tensile Elongation		y Impact N	Notched	Ductile/Brittle		Vicat Soft	ening Temp.	Haze		
	23°C	230°C, 2,16kg	Modulus	Stress at Yield	at Yield at Break		23 °C	23 °C 0 °C -20 °C		Transition Temp.	Deflection Temp. HDT/B	10N	10N 50N		TYPICAL APPLICATIONS	SPECIFIC
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		CHARACTERISTICS
Units	g/cm³	g/10 min	MPa	MPa	%	6	kJ/m²			°C	°C	°C				
GRADE NAME																
PP HETEROPHASIC CO	POLYMER, Mo	plen														
Moplen 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
Moplen 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
Moplen EP240T	0.9	48	950	19	5	>50	10	7	4		78	142		Opaque	TWIM, housewares	NU, high impact
Moplen 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
Moplen EP548T	0.9	48	1350	29	5	>50	4	2.5	2		98	152		Opaque	TWIM	NU and AS
Moplen 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
Moplen EP548U	0.9	70	1450	28	5	30	4	3.5	3	<-50	95	151		Opaque	TWIM, housewares	NU and AS, high flow
Moplen 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
Moplen 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
Moplen 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					ME	CHANICAL					THERM	AL		OPTICAL	Haze TYPICAL	SPECIFIC
	Density	MFR	Tensile	Tensile	Tensile El	ongation	Charpy	/ Impact N	Notched	Ductile/Brittle		Vicat Soft	ening Temp.	Haze		
	23°C	230°C, 2,16kg	Modulus	Stress at Yield	at Yield	at Break	23 °C	0 °C	-20 °C	Transition Temp.	Deflection Temp. HDT/B	10N	50N	1mm		
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	APPLICATIONS	CHARACTERISTICS	
Units	g/cm³	g/10 min	MPa	MPa	%			kJ/m²		°C	°C		С	%		
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 COI	POLYMER-Ads	tif														
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					MECH	HANICAL					ADDI	TIONAL INFO			
	Density 23°C	MFR 230°C, 2,16kg	Tensile Modulus	Tensile Stress at Yield	Tensile Elongation at Break	Flexural Modulus	Charpy Impact		otched -20°C		RECYCLED PC %	RESTRICTION	TYPICAL APPLICATIONS	SPECIFIC CHARACTERISTICS	
Test Method	ISO 1183	ISO 1133-1	ISO 527	ISO 527	ISO 527	ISO 527	IS	0 179/1	eΑ	COLOR	SACE	STRIC	PICAL PLICA	ARAC	
Units	g/cm³	g/10 min	MPa	MPa	%	MPa		kJ/m²		100	REC	High state of the	T A A	8 B	
PP HETEROPHASIC COP	OLYMER, QO	P													
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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