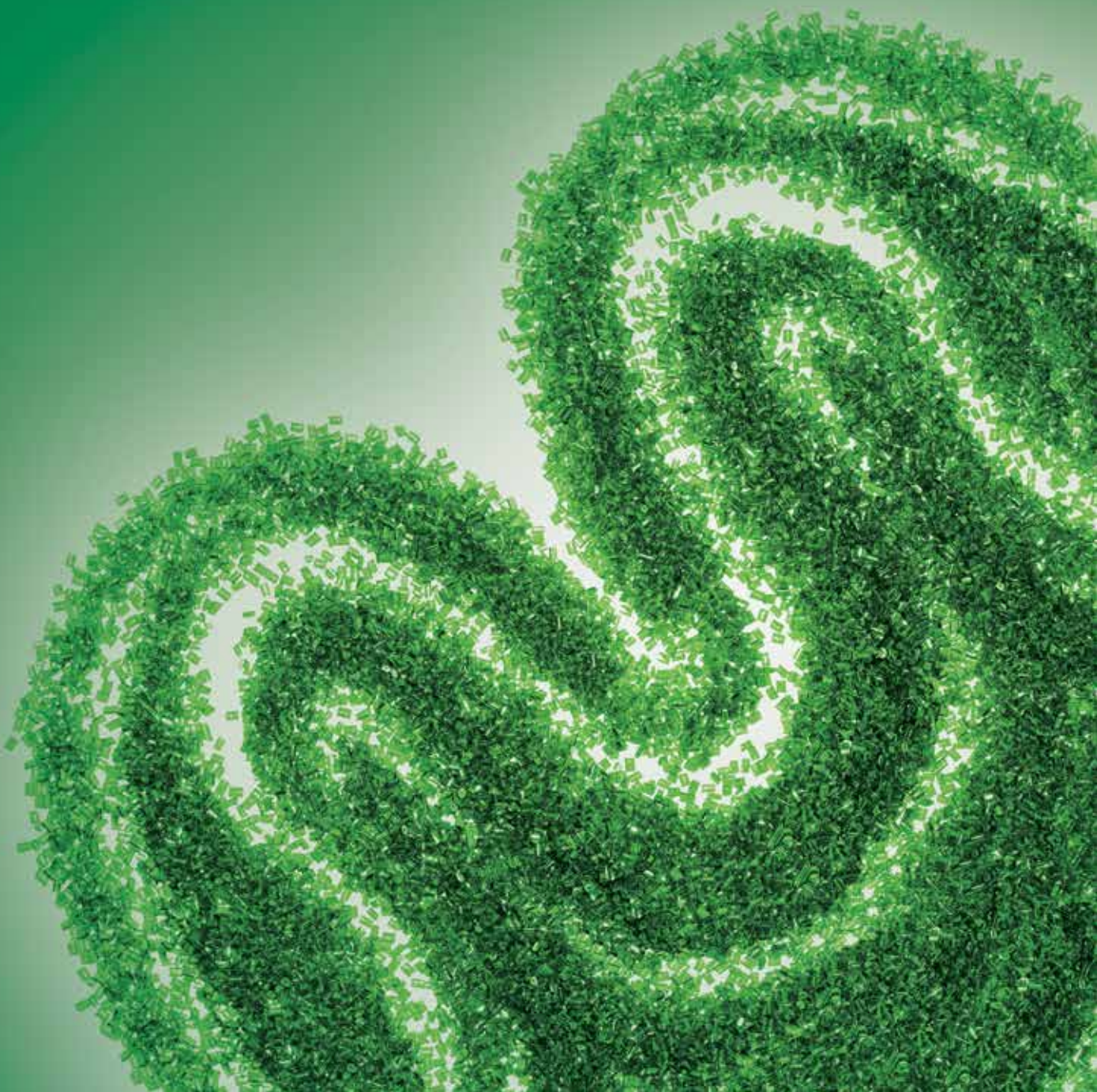


ITI POLAND
Polymers & Compounds



◆ Polypropylene

PROPERTY	UNIT	STANDARD	ECO MEPLEN IC M10 BK	ECO MEPLEN IC M20 BK	ECO MEPLEN IH C20	ECO MEPLEN IH C30	ECO MEPLEN IH C40
Density (23°C)	g/cm3	ASTM D 792 ISO 1183	0,94	0,94	1,04	1,13	1,23
MFI	g/10 min	ASTM D 1238 ISO 1133	10	20	10	10	10
MFI condition	°C/kg	ASTM D 1238 ISO 1133	230/2,16	230/2,16	230/2,16	230/2,16	230/2,16
Shore	-	ASTM D 2240 ISO 868	66	68	70	72	72
Shore condition	A/D	ASTM D 2240 ISO 868	D	D	D	D	D
Water absorption (24h/23°C)	%	ASTM D 570 ISO 62	0,02	0,02	0,02	0,02	0,02
Water absorption (saturation)	%	ASTM D 570 ISO 62	-	-	-	-	-
Filler content	%	ASTM D 2584 ISO 3451	-	-	20	30	40
Mould Shrinkage (parallel)	%	ASTM D 955 ISO 294-4	-	-	1,4/1,8	1,2/1,6	1,1/1,5
Izod impact (notch / 23°C) - dry/cond	J/m	ASTM D 256 ISO 180/1A	100	80	30	30	30
Izod impact (notch / 0°C) - dry/cond	J/m	ASTM D 256 ISO 180/1A	-	-	-	-	-
Tensile yield strenght - dry/cond	N/mm2	ASTM D 638 ISO 527-2	20	22	25	23	20
Tensile yield strain - dry/cond	%	ASTM D 638 ISO 527-2	-	-	-	-	-
Tensile break strenght - dry/cond	N/mm2	ASTM D 638 ISO 527-2	-	-	-	-	-
Elongation at break - dry/cond	%	ASTM D 638 ISO 527-2	40	40	40	30	20
Tensile modulus - dry/cond	N/mm2	ASTM D 638 ISO 527-2	1100	1150	1900	2200	2800
Flexural modulus - dry/cond	N/mm2	ASTM D 790 ISO 178	1000	1100	1800	2100	2700
HDT (0,455 Mpa)	°C	ASTM D 648 ISO 75-2	95	100	110	112	115
HDT (1820 Mpa)	°C	ASTM D 648 ISO 75-2	-	-	58	60	61
VICAT (10 N)	°C	ASTM D 1525 ISO 306	145	150	146	148	150
VICAT (50 N)	°C	ASTM D 1525 ISO 306	60	70	85	90	95
Melting temperature (DSC)	°C	ASTM D 3418 ISO 3146	165	165	165	165	165
FR Flame behaviour	-	UL94	-	-	-	-	-

PHYSICAL

MECHANICAL

THERMAL

FR

> **ECO MEPLEN IC M10 BK**
Polypropylene copolymer injection moulding, medium flow, general porpouse.

> **ECO MEPLEN IC M20 BK**
Polypropylene copolymer injection moulding, easy flow, general porpouse.

> **ECO MEPLEN IH C20**
Polypropylene homopolymer, calcium carbonate 20%, easy molding. Natural, all colours. H: heat stabilize, L: UV stabilized, AS: antistatic.

> **ECO MEPLEN IH C30**
Polypropylene homopolymer, calcium carbonate 30%, easy molding. Natural, all colours. H: heat stabilize, L: UV stabilized, AS: antistatic.

> **ECO MEPLEN IH C40**
Polypropylene homopolymer, calcium carbonate 40%, easy molding. Natural, all colours. H: heat stabilize, L: UV stabilized, AS: antistatic.



ECO compounds are made utilizing 30% of recycled polymers at least. These products are certified by CSI CERT and branded with "CSI Recycled plastic"



◆ Polypropylene

PROPERTY	UNIT	STANDARD	ECO MEPLEN IH T20	ECO MEPLEN IH T30	ECO MEPLEN IH T40	ECO MEPLEN IH F30	ECO MEPLEN IH F40
Density (23°C)	g/cm ³	ASTM D 792 ISO 1183	1,04	1,13	1,25	1,12	1,21
MFI	g/10 min	ASTM D 1238 ISO 1133	10	10	10	9	9
MFI condition	°C/kg	ASTM D 1238 ISO 1133	230/2,16	230/2,16	230/2,16	230/2,16	230/2,16
Shore	-	ASTM D 2240 ISO 868	74	75	76	78	78
Shore condition	A/D	ASTM D 2240 ISO 868	D	D	D	D	D
Water absorption (24h/23°C)	%	ASTM D 570 ISO 62	0,02	0,02	0,02	0,07	0,07
Water absorption (saturation)	%	ASTM D 570 ISO 62	-	-	-	-	-
Filler content	%	ASTM D 2584 ISO 3451	20	30	40	30	40
Mould Shrinkage (parallel)	%	ASTM D 955 ISO 294-4	1,1/1,5	0,9/1,3	0,7/1,1	0,1/0,4	0,1/0,3
Izod impact (notch / 23°C) - dry/cond	J/m	ASTM D 256 ISO 180/1A	30	30	25	80	80
Izod impact (notch / 0°C) - dry/cond	J/m	ASTM D 256 ISO 180/1A	-	-	-	-	-
Tensile yield strenght - dry/cond	N/mm ²	ASTM D 638 ISO 527-2	30	28	26	78	80
Tensile yield strain - dry/cond	%	ASTM D 638 ISO 527-2	-	-	-	-	-
Tensile break strenght - dry/cond	N/mm ²	ASTM D 638 ISO 527-2	-	-	-	-	-
Elongation at break - dry/cond	%	ASTM D 638 ISO 527-2	20	20	20	5	3
Tensile modulus - dry/cond	N/mm ²	ASTM D 638 ISO 527-2	2300	2900	3400	5600	7000
Flexural modulus - dry/cond	N/mm ²	ASTM D 790 ISO 178	2200	2800	3300	4500	5500
HDT (0,455 Mpa)	°C	ASTM D 648 ISO 75-2	120	125	130	155	157
HDT (1820 Mpa)	°C	ASTM D 648 ISO 75-2	65	70	75	140	145
VICAT (10 N)	°C	ASTM D 1525 ISO 306	150	150	150	158	158
VICAT (50 N)	°C	ASTM D 1525 ISO 306	90	90	105	130	130
Melting temperature (DSC)	°C	ASTM D 3418 ISO 3146	165	165	165	165	165
FR Flame behaviour	-	UL94	-	-	-	-	-

> ECO MEPLEN IH T20

Polypropylene homopolymer, talc 20%, easy molding. Natural, all colours. H: heat stabilize, L: UV stabilized, AS: antistatic.

> ECO MEPLEN IH T30

Polypropylene homopolymer, talc 30%, easy molding. Natural, all colours. H: heat stabilize, L: UV stabilized, AS: antistatic.

> ECO MEPLEN IH T40

Polypropylene homopolymer, talc 40%, easy molding. Natural, all colours. H: heat stabilize, L: UV stabilized, AS: antistatic.

> ECO MEPLEN IH F30

Polypropylene homopolymer, glass fibre reinforced 30% chemical coupled. Good mechanical properties. Natural, all colours. H: heat stabilized, L: UV stabilized, D: detergent stabilization.

> ECO MEPLEN IH F40

Polypropylene homopolymer, glass fibre reinforced 40% chemical coupled. Good mechanical properties. Natural, all colours. H: heat stabilized, L: UV stabilized, D: detergent stabilization.



ECO compounds are made utilizing 30% of recycled polymers at least. These products are certified by CSI CERT and branded with "CSI Recycled plastic"



◆ Polypropylene

PROPERTY	UNIT	STANDARD	ECO MEPLEN IH F50	ECO MEPLEN IH S30	ECO MEPLEN IC C20	ECO MEPLEN IC C30	ECO MEPLEN IC C40
Density (23°C)	g/cm3	ASTM D 792 ISO 1183	1,33	1,12	1,05	1,12	1,23
MFI	g/10 min	ASTM D 1238 ISO 1133	9	10	10	10	10
MFI condition	°C/kg	ASTM D 1238 ISO 1133	230/2,16	230/2,16	230/2,16	230/2,16	230/2,16
Shore	-	ASTM D 2240 ISO 868	78	74	70	72	72
Shore condition	A/D	ASTM D 2240 ISO 868	D	D	D	D	D
Water absorption (24h/23°C)	%	ASTM D 570 ISO 62	0,07	-	-	-	-
Water absorption (saturation)	%	ASTM D 570 ISO 62	-	-	-	-	-
Filler content	%	ASTM D 2584 ISO 3451	50	30	20	30	40
Mould Shrinkage (parallel)	%	ASTM D 955 ISO 294-4	0,1/0,3	0,8/1,0	1,4/1,8	1,2/1,6	1,1/1,5
Izod impact (notch / 23°C) - dry/cond	J/m	ASTM D 256 ISO 180/1A	75	25	40	40	35
Izod impact (notch / 0°C) - dry/cond	J/m	ASTM D 256 ISO 180/1A	-	-	-	-	-
Tensile yield strenght - dry/cond	N/mm2	ASTM D 638 ISO 527-2	82	20	24	22	19
Tensile yield strain - dry/cond	%	ASTM D 638 ISO 527-2	-	-	-	-	-
Tensile break strenght - dry/cond	N/mm2	ASTM D 638 ISO 527-2	-	-	-	-	-
Elongation at break - dry/cond	%	ASTM D 638 ISO 527-2	3	50	45	35	25
Tensile modulus - dry/cond	N/mm2	ASTM D 638 ISO 527-2	9800	2100	1800	2100	2600
Flexural modulus - dry/cond	N/mm2	ASTM D 790 ISO 178	9000	1800	1600	1900	2400
HDT (0,455 Mpa)	°C	ASTM D 648 ISO 75-2	162	115	100	102	105
HDT (1820 Mpa)	°C	ASTM D 648 ISO 75-2	145	55	56	58	59
VICAT (10 N)	°C	ASTM D 1525 ISO 306	162	148	140	145	148
VICAT (50 N)	°C	ASTM D 1525 ISO 306	142	88	80	85	90
Melting temperature (DSC)	°C	ASTM D 3418 ISO 3146	165	165	165	165	165
FR Flame behaviour	-	UL94	-	-	-	-	-

PHYSICAL

MECHANICAL

THERMAL

FR



ECO compounds are made utilizing 30% of recycled polymers at least. These products are certified by CSI CERT and branded with "CSI Recycled plastic"



> ECO MEPLEN IH F50

Polypropylene homopolymer, glass fibre reinforced 50% chemical coupled. Good mechanical properties. Natural, all colours. H: heat stabilized, L: UV stabilized, D: detergent stabilization.

> ECO MEPLEN IH S30

Polypropylene homopolymer, glass beads filled 30%. Easy molding. Natural, all colours. H: heat stabilized, L: UV stabilized.

> ECO MEPLEN IC C20

Polypropylene copolymer, calcium carbonate 20%, easy molding. Natural, all colours. H: heat stabilize, L: UV stabilized, AS: antistatic.

> ECO MEPLEN IC C30

Polypropylene copolymer, calcium carbonate 30%, easy molding. Natural, all colours. H: heat stabilize, L: UV stabilized, AS: antistatic.

> ECO MEPLEN IC C40

Polypropylene copolymer, calcium carbonate 40%, easy molding. Natural, all colours. H: heat stabilize, L: UV stabilized, AS: antistatic.

◆ Polypropylene

PROPERTY	UNIT	STANDARD	ECO MEPLEN IC T20	ECO MEPLEN IC T30	ECO MEPLEN IC T40	ECO MEPLEN IC F30	ECO MEPLEN IC F40
Density (23°C)	g/cm3	ASTM D 792 ISO 1183	1,04	1,13	1,21	1,12	1,21
MFI	g/10 min	ASTM D 1238 ISO 1133	10	10	10	9	9
MFI condition	°C/kg	ASTM D 1238 ISO 1133	230/2,16	230/2,16	230/2,16	230/2,16	230/2,16
Shore	-	ASTM D 2240 ISO 868	74	75	76	76	76
Shore condition	A/D	ASTM D 2240 ISO 868	D	D	D	D	D
Water absorption (24h/23°C)	%	ASTM D 570 ISO 62	-	-	-	-	-
Water absorption (saturation)	%	ASTM D 570 ISO 62	-	-	-	-	-
Filler content	%	ASTM D 2584 ISO 3451	20	30	40	30	40
Mould Shrinkage (parallel)	%	ASTM D 955 ISO 294-4	1,1/1,5	0,9/1,3	0,7/1,1	0,1/0,4	0,1/0,3
Izod impact (notch / 23°C) - dry/cond	J/m	ASTM D 256 ISO 180/1A	40	40	35	85	85
Izod impact (notch / 0°C) - dry/cond	J/m	ASTM D 256 ISO 180/1A	-	-	-	-	-
Tensile yield strenght - dry/cond	N/mm2	ASTM D 638 ISO 527-2	28	26	24	70	75
Tensile yield strain - dry/cond	%	ASTM D 638 ISO 527-2	-	-	-	-	-
Tensile break strenght - dry/cond	N/mm2	ASTM D 638 ISO 527-2	-	-	-	-	-
Elongation at break - dry/cond	%	ASTM D 638 ISO 527-2	40	30	20	10	6
Tensile modulus - dry/cond	N/mm2	ASTM D 638 ISO 527-2	2200	2800	3200	5200	6100
Flexural modulus - dry/cond	N/mm2	ASTM D 790 ISO 178	2000	2600	3000	4200	5200
HDT (0,455 Mpa)	°C	ASTM D 648 ISO 75-2	115	120	125	150	152
HDT (1820 Mpa)	°C	ASTM D 648 ISO 75-2	62	67	72	130	135
VICAT (10 N)	°C	ASTM D 1525 ISO 306	145	147	150	142	145
VICAT (50 N)	°C	ASTM D 1525 ISO 306	85	90	95	120	125
Melting temperature (DSC)	°C	ASTM D 3418 ISO 3146	165	165	165	165	165
FR Flame behaviour	-	UL94	-	-	-	-	-

> ECO MEPLEN IC T20
Polypropylene copolymer, talc 20%, easy molding. Natural, all colours. H: heat stabilize, L: UV stabilized, AS: antistatic.

> ECO MEPLEN IC T30
Polypropylene copolymer, talc 30%, easy molding. Natural, all colours. H: heat stabilize, L: UV stabilized, AS: antistatic.

> ECO MEPLEN IC T40
Polypropylene copolymer, talc 40%, easy molding. Natural, all colours. H: heat stabilize, L: UV stabilized, AS: antistatic.

> ECO MEPLEN IC F30
Polypropylene copolymer, glass fibre reinforced 30% chemical coupled. Good mechanical properties. Natural, all colours. H: heat stabilized, L: UV stabilized, D: detergent stabilization.

> ECO MEPLEN IC F40
Polypropylene copolymer, glass fibre reinforced 40% chemical coupled. Good mechanical properties. Natural, all colours. H: heat stabilized, L: UV stabilized, D: detergent stabilization.



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◆ Polypropylene

PROPERTY	UNIT	STANDARD	ECO MEPLEN IC F50	ECO MEPLEN IC S30	ECO MEYTEL I6 BK	ECO MEYTEL I6 F20 BK	ECO MEYTEL I6 F30 BK
Density (23°C)	g/cm3	ASTM D 792 ISO 1183	1,33	1,12	1,13	1,28	1,36
MFI	g/10 min	ASTM D 1238 ISO 1133	9	10	-	-	-
MFI condition	°C/kg	ASTM D 1238 ISO 1133	230/2,16	230/2,16	-	-	-
Shore	-	ASTM D 2240 ISO 868	76	74	-	-	-
Shore condition	A/D	ASTM D 2240 ISO 868	D	D	-	-	-
Water absorption (24h/23°C)	%	ASTM D 570 ISO 62	-	-	1,9	2,3	1,9
Water absorption (saturation)	%	ASTM D 570 ISO 62	-	-	9	7,2	6,3
Filler content	%	ASTM D 2584 ISO 3451	50	30	-	20	30
Mould Shrinkage (parallel)	%	ASTM D 955 ISO 294-4	0,1/0,3	0,8/1,0	1,3/1,7	0,35	0,2
Izod impact (notch / 23°C) - dry/cond	J/m	ASTM D 256 ISO 180/1A	80	35	40/200	60/80	70/80
Izod impact (notch / 0°C) - dry/cond	J/m	ASTM D 256 ISO 180/1A	-	-	30	40	50
Tensile yield strenght - dry/cond	N/mm2	ASTM D 638 ISO 527-2	80	19	55	-	-
Tensile yield strain - dry/cond	%	ASTM D 638 ISO 527-2	-	-	4	-	-
Tensile break strenght - dry/cond	N/mm2	ASTM D 638 ISO 527-2	-	-	-	95/75	120/90
Elongation at break - dry/cond	%	ASTM D 638 ISO 527-2	4	60	80/150	5/10	4/8
Tensile modulus - dry/cond	N/mm2	ASTM D 638 ISO 527-2	11000	1800	2400/1100	6000/4500	7500/5800
Flexural modulus - dry/cond	N/mm2	ASTM D 790 ISO 178	8600	1600	2200/1000	4800/3500	6200/5500
HDT (0,455 Mpa)	°C	ASTM D 648 ISO 75-2	157	110	150	200	208
HDT (1820 Mpa)	°C	ASTM D 648 ISO 75-2	140	50	50	195	205
VICAT (10 N)	°C	ASTM D 1525 ISO 306	155	143	-	-	-
VICAT (50 N)	°C	ASTM D 1525 ISO 306	135	83	190	205	210
Melting temperature (DSC)	°C	ASTM D 3418 ISO 3146	165	165	220	220	220
FR Flame behaviour	-	UL94	-	-	-	-	-



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> ECO MEPLEN IC F50

Polypropylene copolymer, glass fibre reinforced 50% chemical coupled. Good mechanical properties. Natural, all colours. H: heat stabilized, L: UV stabilized, D: detergent stabilization.

> ECO MEPLEN IC S30

Polypropylene copolymer, glass beads filled 30%. Easy molding. Natural, all colours. H: heat stabilized, L: UV stabilized.

> ECO MEYTEL I6 BK

Polyamide 6 general purpose. Black.

> ECO MEYTEL I6 F20 BK

Polyamide 6 glass fibre reinforced 20%. General purpose, black. H: heat stabilized.

> ECO MEYTEL I6 F30 BK

Polyamide 6 glass fibre reinforced 30%. General purpose, black. H: heat stabilized.