

QUALITY+ PERFORMANCE

POLYMERS PRODUCT BROCHURE
ASIA PACIFIC

PRODUCT CATEGORY

PAGE

PE (POLYETHYLENE)

• SUPEER™ mPE (Metallocene polyethylene), COHERE™ POP (Polyolefin Plastomer)	1
• LLDPE (Linear Low Density Polyethylene)	2-3
• LDPE (Low Density Polyethylene)	4-5
• HDPE (High Density Polyethylene)	6-7

PP (POLYPROPYLENE)

• Homopolymer Polypropylene	8
• Random Copolymer Polypropylene	9
• Impact Copolymer Polypropylene	10
• PP Compound / STAMAX™	11-12

ETP (ENGINEERING THERMOPLASTIC)

• PC (Polycarbonate)	13-20
• PBT (Polybutylene Terephthalate)	21-22
• ABS (Acrylonitrile Butadiene Styrene), ASA (Acrylic Styrene Acrylonitrile)	23-24
• PC Blends (PC/ASA, PC/ABS, PC/PBT, PC/PET)	25-30
• POM (Polyoxymethylene), PMMA (Polymethyl Methacrylate)	31-32

ELASTOMERS

• FORTIFY™ POE (Polyolefin Elastomer)	33
• BR (Polybutadiene Rubber)	33
• EPDM (Ethylene Propylene Diene Rubber)	34
• POLYOLEFIN COMPOUND	34

SUPEER™ mPE (METALLOCENE POLYETHYLENE)

PROCESS	GRADE	MI,g/10min (190°C, 2.16kg)	DENSITY (g/cm³)	TYPICAL APPLICATIONS	CHARACTERISTICS
Blown Film	8112(L)	1.1	0.912	Lamination film, freezer bag, liquid pouch, heavy duty bag, industrial liner, agriculture film, stretch hood, surface protective film, silage film	<ul style="list-style-type: none"> • C8 comonomer, bimodal • Excellent mechanical properties (dart impact, tear and puncture) and optical properties • Excellent sealability and processability • Superior organoleptic (less odor/smell, low volatile) Grade name with suffix L contains slip & antiblock agents
	8115(L)	1.1	0.915		
Cast Film	8315	3.0	0.915	Stretch wrap film, silage film	<ul style="list-style-type: none"> • C8 comonomer, bimodal • Excellent processability and organoleptic (less odor/smell, low volatile) • Excellent mechanical and optical properties
Pipe	P8200RT	0.5	0.941	Designed to be PE-RT type II. Underfloor heating and multilayer pipes for heating and plumbing	<ul style="list-style-type: none"> • C8 comonomer, bimodal • Excellent long term hydrostatic strength, with outstanding stress crack, resistance and superior processability

COHERE™ POP (POLYOLEFIN PLASTOMER)

PROCESS	GRADE	MI,g/10min (190°C, 2.16kg)	DENSITY (g/cm³)	TYPICAL APPLICATIONS	CHARACTERISTICS
Blown Film	8170D	1.0	0.868	Sealing layer of advanced flexible packaging (meat, cheese, dry foods – cookies, chips, cereal, liquid, stand-up pouch and etc) Cling layer in stretch wrap film; Adhesive layer in surface protect film	<ul style="list-style-type: none"> • C8 comonomer • Exceptional heat sealability (low seal initiation temperature, excellent hot tack strength) • Excellent optics and toughness • Superb organoleptic properties • Easy processing
	8185	1.0	0.885		
	S100(L)	1.0	0.900		
	8102(L)	1.0	0.902		
Cast Film	8570D	5.0	0.868		Grade name with suffix L contains slip & antiblock agents Grade name with suffix D contains anticaking agent
	8380	3.0	0.880		
	S400	3.5	0.900		
	8402	3.5	0.902		

LLDPE (LINEAR LOW DENSITY POLYETHYLENE)

PROCESS	GRADE	MI,g/10min (190°C/2.16kg)	DENSITY (g/cm ³)	TYPICAL APPLICATIONS	CHARACTERISTICS
Blown Film	518NJ	0.5	0.918	Heavy duty shipping sack, agriculture film, liner bag	Excellent mechanical properties (especially dart impact strength and puncture resistance)
	920NT	0.85	0.920	Agriculture film, heavy duty packaging, shrink film	Very good mechanical strength and processability
	118WJ	1.0	0.918	Lamination film, food packaging, heavy duty packaging	Very good mechanical strength and processability, High slip & antiblock
	118ZJ	1.0	0.918	Agriculture film, heavy duty packaging, lamination film, food packaging, shrink film	Very good mechanical strength and processability, Medium slip & antiblock
	118NJ	1.0	0.918	Agriculture film, heavy duty packaging, lamination film, food packaging, shrink film	Very good mechanical strength and processability, No slip & antiblock
	118WSJ	1.0	0.918	Lamination film, food/non-food packaging, shopping bag	Good clarity, contains slip and antiblock
	120WJ	1.0	0.918	High clarity film for food/non-food packaging	Excellent clarity, contains slip and antiblock
	218WJ	2.0	0.918	Lamination film, food/non-food packaging, shopping bag	Good mechanical strength, processability and clarity, contains slip & antiblock
	218NJ	2.0	0.918	Lamination film, food/non-food packaging, shopping bag	No slip and antiblock
	222WT	2.0	0.922	Agriculture film, Lamination film, food/non-food packaging, shopping bag	Contains slip and antiblock
	218NT	2.0	0.920	Lamination film, food/non-food packaging, shopping bag	No slip and antiblock
Cast Film	218BJ	2.0	0.918	Cast stretch film for both manual and machine wrap, food cling film	High heat stabilization, excellent processability, very good mechanical, optical properties and stretchability
	318BJ	2.8	0.918		
	C2820T	2.8	0.920	Lamination film, tissue film food/non-food packaging	High heat stabilization, excellent processability, very good mechanical, optical properties and stretchability

LLDPE (LINEAR LOW DENSITY POLYETHYLENE)

PROCESS	GRADE	MI,g/10min (190°C/2.16kg)	DENSITY (g/cm ³)	TYPICAL APPLICATIONS	CHARACTERISTICS
Wire & Cable	318CNJ	2.8	0.918	1-step or 2-step silane crosslinking low voltage power cable insulation	Excellent cable extrusion processability and crosslinking properties
	320NT	2.8	0.920	1-step or 2-step silane crosslinking low voltage power cable insulation	Excellent cable extrusion processability and crosslinking properties
Roto-molding	R50035	5.0	0.935	Water tank, chemical tank, toy, road barrier, Playground, furniture. Cap and closure	Excellent grindability Excellent stiffness and good balance between impact strength and ESCR
	R50035E	5.0	0.935	Water tank, chemical tank, toy, road barrier, Playground, furniture	Excellent grindability Excellent stiffness and good balance between impact strength and ESCR High UV stabilization
Injection Molding Masterbatch	M200024	20	0.924	Cap and closure (oil bottle, theft-proofing, etc.), houseware, masterbatch, metal coating, carpet backing	High flow ability with high gloss, low temperature toughness and good stress crack resistance
	M200024T	20	0.924	Masterbatch, cap and closure (oil bottle, theft-proofing, etc.), houseware	High flow ability with high gloss, low temperature toughness and good stress crack resistance
	MG200024	20	0.924	Masterbatch, metal coating, carpet backing	Granules, easy dispersing and mixing with pigments
	M500026	50	0.926	Cap and closure, houseware, masterbatch	Excellent flow ability, high gloss and toughness, good stress crack resistance
	MG500026	50	0.926	Masterbatch, metal coating, carpet backing	Granules, easy dispersing and mixing with pigments
Pipe	128CNJ	1	0.928	Telecommunication cables, electrical conduits and drip & irrigation pipes	Combining stiffness, toughness and high melt strength with an excellent processability due to its broad molecular weight distribution
	P438J	0.4	0.938	Cylindrical and tape drip irrigation pipes	Excellent processability with a high level of consistency; Exceptional mechanical properties and stress crack resistance

LOW DENSITY POLYETHYLENE (LDPE)

PROCESS	GRADE	MI,g/10min (190°C/2.16kg)	DENSITY (g/cm ³)	TYPICAL APPLICATIONS	CHARACTERISTICS
Blown Film	HP0322NN	0.33	0.922	Collation shrink film, greenhouse film, heavy duty bag	Excellent toughness and puncture resistance
	HP0323NN	0.30	0.923		
	HP0722NN	0.75	0.922	Medium-duty bag, collation shrink film, lamination film, shopping bag, frozen food bag, bread bag	Very good toughness and optical Easy processing HP0823JN contains slip and antiblock
	HP0823NN	0.80	0.923		
	HP0823JN	0.80	0.923		
	HP2022JN	2.0	0.922	Thin collation shrink film, lamination film, general purpose film, textile packaging and food bag	Very good processability Optical properties HP2022JN / HP2023JN contains Slip and antiblock
	HP2022NN	2.0	0.922		
	HP2023JN	2.0	0.923		
	HP2023NN	2.0	0.923		
	HP2027LN	2.0	0.927	Medium / light collation shrink film, lamination film, pouch, FFS (fill, form and seal)	Superior film stiffness and down-gauging potential Excellent optical properties Easy processing HP2027LN contains slip & antiblock
	HP2027NN	2.0	0.927		
	HP4023WN	4.0	0.923	High clarity laundry bag, textile wrapping film, zip-lock bag	Excellent processability Outstanding optical property Good mechanical property HP4023WN / HP4024WN contains slip and antiblock
	HP4024WN	4.0	0.923		
	HP4024N	4.0	0.923		
	HP4027JN	4.0	0.927	Medium / light collation shrink film, lamination film, Zipper bag, pouch	Superior film stiffness and down-gauging potential Outstanding optical properties Easy processing HP4027JN contains slip & antiblock
	HP4027NN	4.0	0.927		
Injection/ masterbatch	HP7022	7.0	0.922	Cap & closure, lid, housewares, master batch compounding	Good mechanical and impact High gloss Easy processing
	HP7023	7.0	0.923	Cap & closure, lid, housewares, master batch compounding	Good mechanical and impact High gloss Easy processing
	HP20023	20	0.923	Color master batch, compounding, injection	High flow ability, high loading and easy mixing with filler and pigments

LOW DENSITY POLYETHYLENE (LDPE)

PROCESS	GRADE	MI,g/10min (190°C/2.16kg)	DENSITY (g/cm³)	TYPICAL APPLICATIONS	CHARACTERISTICS
Foaming	1905U0	5.0	0.919	Packaging, Building & Construction	Excellent resin consistency Good foam production stability Very broad MWD Ultra Melt Strength
	2202U0	1.9	0.922		
	2004CX3	4.6	0.920	Automotive, Sports and Leisure, Packaging Process: Extrusion with crosslinking	Excellent resin consistency Good foam production stability High reactivity in crosslinking Contains Anti Block & Slip agents
	2102X0	1.9	0.921	Automotive, Sports and Leisure, Packaging, Building & Construction Process: Batch; Extrusion with and without crosslinking	Excellent resin consistency Good foam production stability Broad MWD High reactivity in crosslinking
	2102X3	2.5	0.921	Automotive, Sports and Leisure, Packaging, Building & Construction Process: Extrusion	Excellent resin consistency Good foam production stability Broad MWD Contains Anti Block & Slip agents
	2402CX0	2.0	0.924	Automotive, Sports and Leisure, Packaging Process: Batch; Extrusion with crosslinking	Excellent resin consistency Good foam production stability High reactivity in crosslinking
	2502X0	2.0	0.925	Automotive, Sports and Leisure, Packaging, Building & Construction Process: Extrusion	Excellent resin consistency Good foam production stability Broad MWD High resin density
	2601X1	0.65	0.926	Packaging, Building & Construction Process: Extrusion	Excellent resin consistency Good foam production stability Broad MWD High resin density Contains Anti Block & Slip agents
	2602X1	1.5	0.926		
	HP2024JDF	2.0	0.924	Automotive, Sports and Leisure, Packaging, Building & Construction Process: Extrusion	Excellent resin consistency Good foam production stability Contains Anti Block & Slip agents
	HP2024NDF	2.0	0.924	Automotive, Sports and Leisure, Packaging, Building & Construction Process: Batch; Extrusion with and without crosslinking	Excellent resin consistency Good foam production stability
	HP0824NDF	0.8	0.924		
	HP2022NDF	2.0	0.922	Automotive, Sports and Leisure, Packaging, Building & Construction Process: Batch; Extrusion with and without crosslinking	Excellent resin consistency Good foam production stability High reactivity

HDPE (HIGH DENSITY POLYETHYLENE) - UNIMODAL

PROCESS	GRADE	MI,g/10min (190°C/2.16kg)	DENSITY (g/cm³)	TYPICAL APPLICATIONS	CHARACTERISTICS
Blown Film	FJ00952	0.05 9(MI ₂₁)	0.952	Bags-on-roll, T-shirt bag, shopping bag	Excellent processability and mechanical strength, TNPP free grade
	F01552 FJ01552	0.15 16(MI ₂₁)	0.952	Millinery and notion bags, deep freeze bags	Excellent processability and drawdown properties, FJ01552 is TNPP free grade
	F04660	0.7 46(MI ₂₁)	0.961	Core-layer in co-extruded film	High stiffness, low gel, excellent water vapor barrier property
Blow Molding	BM1052 BM1052J	0.05 10(MI ₂₁)	0.952	Shipping container, industrial container, jerry cans	Excellent ESCR, processability and mechanical strength, BM1052J is TNPP free grade
	B5429	0.3 29(MI ₂₁)	0.954	Container for household and industrial chemicals	Very good processability, ESCR and mechanical properties
	BM6246LS	0.7 46(MI ₂₁)	0.961	Bottles for milk, fruit juice and dairy products	Homopolymer with good organoleptic properties, toughness-rigidity balance and good processability that offers opportunity for weight reduction
	B4660AB	0.7 21.6(MI ₄₆)	0.961	Bottles for milk, fruit juice, dairy products and water"	imparting high rigidity, toughness, good processability and lower odour
Injection Molding	CC453	4	0.953	Water and beverage bottle caps	Superior organoleptic properties, very good processability
	CC860	7	0.959	Water and beverage bottle caps	Superior organoleptic properties, very good processability
	M40053S	4	0.953	Crate, pail, pallet, logistic box	High stiffness and toughness Good ESCR properties Contains UV stabilizer
	M40060S	4	0.960		Good toughness and rigidity. contains UV stabilizer
	M80064 M80064S	8	0.964		High toughness and rigidity, low warpage M80064S contains UV stabilizer
	M200056	20	0.956	Houseware, cap and closure, cup, lamitube shoulder	High flow ability, high stiffness
	M300054	30	0.954		

HDPE (HIGH DENSITY POLYETHYLENE) - MULTIMODAL

PROCESS	GRADE	MI,g/10min	DENSITY (g/cm ³)	TYPICAL APPLICATIONS	CHARACTERISTICS
Blown Film	F00851	0.30(MI ₅) 9(MI ₂₁)	0.952	Grocery sacks, shopping bags, refuse bags, thin films for bag on roll	Excellent processability, high film strength and rigidity
	F00851A	0.30(MI ₅) 9(MI ₂₁)	0.953		
	FI0750	0.22(MI ₅) 7.5(MI ₂₁)	0.950		
Blow Molding	B5822	1.2(MI ₅) 22(MI ₂₁)	0.958	Containers for consumer goods, detergents, toys	Very good ESCR, stiffness and processability
	B1054	0.45(MI ₅) 9.5(MI ₂₁)	0.954	Designed for standard and lightweight jerry cans, food contact approval container	Very good ESCR, processability and high stiffness with good impact strength
	B5403	2.6(MI ₂₁)	0.954	Tight and open head drum	Excellent combination of stiffness and ESCR with good impact strength
	B5308	21.6(MI ₈)	0.953	specifically designed for blow molding floaters for floating photovoltaic (PV) panel systems "	excellent mechanical properties, very good toughness and stiffness balance, long lifetime and easy blow molding processability, high ESCR. "
Compression molding/ Injection molding	CC027SL	0.8(MI ₂)	0.953	Carbonated soft drink cap	Excellent ESCR, processability and organoleptic properties
	CC254	2.1(MI ₂)	0.953	Caps and closure for aseptic beverage packaging, tea and juice packaging	Good balance of toughness-rigidity, excellent processability and organoleptic properties.
Pipe Extrusion	P6006	0.23(MI ₅) 6.2(MI ₂₁)	0.959	Gas, water, sewage pipes and corrugated & spiral pipes	Black, PE 100, Multimodal, pressure pipe and excellent stress crack resistance properties (ESCR)
	P6006N	0.23(MI ₅) 6.2(MI ₂₁)	0.949	Gas, water, sewage pipes and corrugated & spiral pipes	Natural, PE 4710, Multimodal and excellent stress crack resistance properties (ESCR)
	P6006NA	0.23(MI ₅) 6.2(MI ₂₁)	0.949		Natural, designed to be PE4710, Multimodal and excellent stress crack resistance properties (ESCR)
	P4808N	0.23(MI ₅) 6.2(MI ₂₁)	0.949	Non-pressure pipe applications such as irrigation, cable conduits, corrugated and gravity pipe segments	Natural, Multimodal and excellent stress crack resistance properties (ESCR)
	P4808NA	0.23(MI ₅) 6.5(MI ₂₁)	0.949		
	P5305N	4.5(MI ₂₁)	0.953		
	P5307N	7(MI ₂₁)	0.953		
	P5616N	16(MI ₂₁)	0.956		
	P6006AD	0.23(MI ₅) 6.4(MI ₂₁)	0.959	Pressure pipes for potable water, gas, sewage and other liquids	Black, PE 112 (class MRS 11.2 MPa) specially designed for pressure pipe application. It delivers exceptional processing performance
	P6006LS	0.23(MI ₅) 8(MI ₂₁)	0.960	Pressure pipes for potable water, gas, sewage. Useful for large-diameter pipes and pressure pipes with low standard dimension ratio(SDR)	Black, PE 112, Multimodal, delivers exceptional low sag performance. Low sagging grade, particularly for large diameter pipes
	P4200RT	0.45(MI ₅) 9.5(MI ₂₁)	0.947	Designed to be PE-RT Type II. Underfloor heating and multilayer pipes for heating and plumbing.	Excellent stress crack resistance properties (ESCR) combined with very good long-term hydrostatic strength, high heat and extremely high extraction stability
	P6006AO	0.23(MI ₅)	0.950	Gas pressure pipes	Orange. Designed to be PE100. Multi-modal, good stress crack resistance

HOMOPOLYMER POLYPROPYLENE

PROCESS		GRADE	MFR, g/10min (ASTM D 1238, 230°C/ 2.16kg)	TYPICAL APPLICATIONS	CHARACTERISTICS
Raffia Extrusion		PP500P	3.0	Woven bag, flexible intermediate bulk container (FIBC), rope & twines, carpet backing, geotextiles & concrete reinforcement	Consistent processability & good mechanical properties
		PP506P	4.8	Low denier tapes, woven bags, carpet backing & concrete reinforcement	Good high line speed process ability, good mechanical properties
Fiber Extrusion		PP510P	12	Continuous fiber (CF) & SF	Good processability, spin ability & gas fading resistance
		PP518A PP518P	25	Bulk continuous fiber (BCF), CF & SF for carpet pile & upholstery	
		PP511A	25	Spunbond nonwoven fabric for diaper, filters & hygienic products	Consistent processability, thread line stability, color consistency & gas fading resistance
		PP519A	35		
		PP514M12	1200*	Meltblown nonwoven fabric for diaper, filters & hygienic products	Good processability & fiber uniformity. Available in pelletized form. No peroxides
Film Extrusion	IPP	PP520L	10	Used for inflated polypropylene (IPP) film process for producing garment & textiles bag, magazine covers, food packaging	Good optical properties & processability
	BOPP	PP521P	3.0	Core layer in co-extruded BOPP (biaxially oriented polypropylene) film, plain BOPP film	Excellent optical properties, high tensile strength, metalizable
		PP524P	2.0		Excellent optical properties, very high tensile strength, metalizable
		PP5212P	3.0		High crystallinity, very high stiffness, tensile properties & metalizable
	CPP	PP526P	8.0	Core layer in co-extruded CPP (cast polypropylene) film, plain CPP film	High gloss & clarity, high melt strength metalizable
Thermoforming		PP522K	3.0	Cup, trays, lids & various thin wall containers	High stiffness, very good clarity and aesthetics, very good dimensional stability
		PP528K	3.0		High stiffness, good clarity, good dimensional stability
		PP5271K	3.0		Very high stiffness, very good clarity & good dimensional stability
Injection Molding		PP570P	8.0	Household articles	Consistent processability, good gloss & dimensional stability
		PP5702P	9.0	Household articles, caps & closures, containers, toys	
		PP5703P	12		
		PP575P	11		
		PP5780P	25	Household articles, toys & thin wall packaging	
		PP5707N	25	Housewares, thin wall packaging, caps & closures & garden furniture.	Consistent processability, fast molding cycle, good gloss & clarity, high stiffness
		PP579S	47	Housewares, thin wall packaging, appliances, caps & closures	Low warpage, high stiffness, outstanding flowability, good contact transparency & high gloss
		PP591A	6.0	Automotive compounding applications where high rigidity and good thermal characteristics are required	Medium flowability, high stiffness & formulated with dedicated automotive additive package
		PP595A	47		High flowability, high stiffness & formulated with a dedicated automotive additive package

* Final melt flow rate of meltblown fabric processed at 275-295°C

RANDOM COPOLYMER POLYPROPYLENE

PROCESS	GRADE	MFR, g/10min (ASTM D 1238, 230°C/ 2.16kg)	TYPICAL APPLICATIONS	CHARACTERISTICS
Injection Molding	QR6701K	10	Clear housewares & packaging items, appliances, caps & closures, lids & ISBM bottles	Consistent processability, good stiffness, excellent clarity, lower energy consumption & less cycle time due to low processing temperatures
	QR6731K	25	Clear housewares items, caps & closures, food containers, ISBM bottles, lids & CD boxes	
	QR6711K	45	Clear thin walled containers & boxes, housewares, caps & closures, lids	Consistent processability, good stiffness, excellent clarity, low warpage, high flowability, lower energy consumption & less cycle time due to low processing temperatures
Pipe Extrusion	PP642NH	0.25	Green color hot/cold water pipes & fittings	Good stiffness, excellent chemical & heat stability. Pre-color compounded PPR grade with excellent pigment dispersion

IMPACT COPOLYMER POLYPROPYLENE

PROCESS	GRADE	MFR, g/10min (ASTM D 1238, 230°C/ 2.16kg)	TYPICAL APPLICATIONS	CHARACTERISTICS
Pipe Extrusion	PP61EK61PS	0.3	Natural color PP-B for sewage & drainage pipes	Good stiffness & excellent ring stiffness. Suitable for corrugated pipes single & double wall
	PP71EK71PS	0.3	Natural color PP-B for sewage & drainage pipes	
Injection Molding	PP64M40T	2.0	Battery casing, crates, sheets & pipes	High impact resistance & medium stiffness
	PP66M10T	3.5	Pails, crates & housewares	Good processability, very high impact resistance & medium stiffness
	PP95MK40T	3.5	Pails, crates, housewares & thermoformed thin wall packaging	Good processability, very high impact resistance & high stiffness
	PP46MNK45	6.0	Beverage closures, housewares and industrial packaging	Consistent process ability, fast molding cycle, high stiffness and good impact resistance at low temperature
	PP56M65	7.0	Battery cases, pails & containers, crates & boxes	Excellent long-term heat resistance, medium impact resistance & low warpage tendency
	PP87MK40T	8.0	Child safety seat, toys, battery case, suitcase & compounding	Very high impact strength & high stiffness
	PP77MK40T	10	Housewares, garden furniture, toys, appliances, pails & containers	High stiffness & high impact resistance
	PP57MNK10	12	Garden furniture, housewares, pails & containers, toys, crates & boxes	High stiffness & medium impact resistance
	PP57MNK40	12	Garden furniture, housewares, pails & containers, toys, crates & boxes	High stiffness & medium impact resistance
	PP48MK40	16	Pails & containers, housewares, garden furniture, crates & boxes	Medium flowability, medium stiffness & impact resistance
	PP49MK45	21	Automotive interior & exterior, home appliance parts, housewares & compounding	
	PP511MK40T	29	Home appliance parts, automotive interior & exterior, thin wall injection articles & compounding	High stiffness & medium impact resistance
	PP511MK46	30	Appliances, housewares, pails & containers	High stiffness & medium impact resistance, excellent organoleptic properties
	PP412MK49	45	Housewares, toys, appliances & thin wall containers	Fast molding cycle, high stiffness & medium impact resistance
	PP513MNK40T	60	Automotive interior & exterior, thin wall injection articles & compounding	Good processability, high stiffness & medium impact resistance
	PP513MN40	70	Thin wall injection molded articles	Very fast molding cycle & good impact resistance
	PP513MK46	70	Thin wall injection molded articles	Very fast molding cycle, excellent impact / stiffness balance & excellent organoleptic properties
	FPC70T	70	Thin wall injection molded articles	Very fast molding cycle, excellent impact / stiffness balance & excellent organoleptic properties, phthalate free

PP COMPOUND (MINERAL OR SHORT GLASS FIBER REINFORCED POLYPROPYLENE)

PROCESS	GRADE	MFR, g/10min (230°C/ 2.16kg)	IZOD IMPACT, KJ/m ² (notched+23°C)	E-MODULUS, MPa	APPLICATIONS	CHARACTERISTICS
Injection Molding	15T1020	7	3.4	2700	General purpose, Under the bonnet	High modulus and good heat stabilization
	37T1020U	13	5.7	2350		Excellent balance of stiffness and impact resistance
	3310H	25	3	2300		Excellent balance of mechanical property and processing flow
	3720E	18	6	2200	Interior applications	Excellent stiffness and impact ratio with a low emission and fogging behavior
	7705	22	20	1900		High scratch resistance, high stiffness, good impact, high flow and good esthetical performance
	9140	22	29	1870		Good aesthetic performance, high scratch resistance, high stickiness resistance
	9146	20	10	1900		Good aesthetic performance, high scratch resistance, high stickiness resistance
	9110	23	30	1550		Excellent impact and stiffness ratio, high flow, very high scratch resistance, no stickiness and low density
	9125	20	12	1800		Aesthetic performance, high scratch resistance with high stiffness, good impact and high flow, broad processing window
	9135	22	12	1900		Excellent impact and stiffness, esthetical performance, a very high scratch resistance, no stickiness, high flow
	9310D	20	10	1660		Lightweight, balance of mechanical property and good esthetical performance
	5450	20	NB	1000	Exterior application	Low density, very high flow, high stiffness and high impact
	5405	20	NB	1200		Excellent flow, high impact and good stiffness. Excellent esthetical performance, very low tiger stripe visibility
	7530	15	NB	1250		Good flow, high impact and stiffness, low shrinkage and CLTE, suitable for zero gap design bumper and trims
	8500D	9	NB	1500		Low density and excellent stiffness impact balance, suitable for weight reduction with complex and large shape
	108CS20	7	NB	1500		Good flow, impact and stiffness
	G3220A	17	9.5	4500	Under the bonnet applications	Short glass fiber reinforced PP with good performance and fast processing
	G3230A	11	10	6900		Short glass fiber reinforced PP with good performance and fast processing
	G3220AE	17	10	4500		Short glass fiber reinforced PP with good performance and fast processing Low emission & low smell
	G3230AE	12	12	6300		Short glass fiber reinforced PP with good performance, fast processing and low emission value
	G3240A	5	10	8900		Short glass fiber reinforced PP with good performance and fast processing
	G3135X	2	10	8100		Short glass fiber reinforced PP with high stiffness, high impact, high heat resistance and chemical resistance
	G1620B	1.0	17	2800	Natural color PPR-GF for three layer PPR-GF composite pipes for hot/cold water pipes	Good stiffness, excellent chemical & heat stability. Reduced CLTE and hence less expansion joints and require less number of supports. Pipes can be made of higher SDR as compared to the normal PPR pipes
	1600	3.7	52	1265	outdoor consumer injection molded applications;	medium flow, UV stabilize

STAMAX™ LONG GLASS FIBER REINFORCED POLYPROPYLENE

PROCESS	GRADE	E-MODULUS MPa	TENSILE STRENGTH, MPa	CHARPY IMPACT, KJ/m ² (unnotched +23°C)	APPLICATIONS	CHARACTERISTICS
Injection Molding	20YM240	4800	81	34	Interior and under the bonnet applications such as tailgates, front-end modules and door structures	The PP homopolymer based materials offer low-weight, cost-effective solutions due to their extremely high stiffness and good dimensional stability. Excellent balance of low emission and low smell performance
	30YM240	7000	109	56		
	30YM241	7000	109	56		
	30YM243	7000	109	56		
	40YM240	9400	121	57		
	40YM240E	8200	110	55		
	40YM243	8200	110	55		
	60YM240	13500	110	57		
	60YM241	13500	110	57		
	60YM243	13500	110	57		
	20YK270E	4300	62	40	Interior applications such as dashboard carriers	The PP copolymers based materials offer very high impact performance, fully complying with dashboard carrier knee and head impact requirements, as well as good stiffness and smell performance
	30YK270E	6400	98	66		
	60YK270E	12000	102	60		

LEXAN™ RESIN PC (POLYCARBONATE)

PROCESS	SERIES	GRADE	MFR, g/10min (ASTM D 1238, 300°C/1.2kg)	IZOD IMPACT, J/m (ASTM D 256, notched, 23°C)	TYPICAL APPLICATION	CHARACTERISTICS
Injection Molding	Auto Lighting	LS2	11	800	Automotive Lens	UV-stabilized, Medium viscosity AMECA certified
		LS1	17.5	690	Automotive Lens	UV-stabilized, Low viscosity AMECA certified
	General Purpose	141R	10.5	800	Small appliance, telecom equipment, Automotive, consumer electronics	Internal mold release
		143R	10.5	800	Lighting, telecom equipment, consumer electronics, Audio, packaging	UV-stabilized , Internal mold release
		123R	17.5	690	Automotive interior & exterior, consumer electronics, lighting	UV-stabilized , high flow and internal mold release for intricate parts
		241R	10.5	800	Desktop, printer, wall plate, Router	V2, internal mold release
		243R	10.5	800	Wiring device, lighting, Small appliance	UV-stabilized, V2, internal mold release
		223R	17.5	690	Wireless communication, lighting reflector, smart meter, Home appliance, Camera	UV-stabilized , V2, high flow and internal mold release for intricate parts
		HF1110R	25	640	Wireless device, game player, document handling machine	Excellent flow, easy mold release for thin wall parts
		121R	17.5	690	Automotive interior & exterior, consumer electronics, lighting;	high flow and internal mold release for intricate parts

LEXAN™ RESIN PC (POLYCARBONATE)

PROCESS	SERIES	GRADE	MFR, g/10min (ASTM D 1238, 300°C/1.2kg)	IZOD IMPACT, J/m (ASTM D 256, notched, 23°C)	TYPICAL APPLICATION	CHARACTERISTICS
Injection Molding	FDA	144R	10.5	800	Home appliance, food processor, toy, food disposable	FDA food contact compliant, internal mold release
		244RF	10.5	800	Home appliance such as: Microwave oven, coffee machine, water kettle	FDA food contact compliant,V2, internal mold release
	Eyewear	OQ4005	8.5	900	Sunglasses Lens	Good optical properties and cleanness, UV stabilized,400nm UV cut off
Extrusion	General purpose	103R	7	900	Sheet, profile part	Without sink mark in thicker thickness, UV stable for outdoor and lighting, internal mold release
Blow Molding	Packaging	PK2870	2.5	750	5 gallon water bottle	Branched, high viscosity, blow molding, high melt strength and impact resistance, transparent colors only; FDA 21CFR177.1580, European food contact regulation EC Directive 2002/72/EC
Compounding	General Purpose	IR2210	10	800	Compounding	Medium flow , heat stability
		IR1810	22	640	Compounding	High flow , heat stability

LEXAN™ PC FOR LIGHT MANAGEMENT

PROCESS	SERIES	GRADE	MFR, g/10min (ASTM D 1238, 300°C/1.2kg)	IZOD IMPACT, J/m (ASTM D 256, notched, 23°C)	TYPICAL APPLICATION	CHARACTERISTICS
Injection Molding	Light Management	LUX2180T	18	650	Optical parts such as : LED 1 st lens, lighting lens, light guide	High transmission and cleanness, UV stabilized, color stability, V2, F1
		LUX2910T	55	500	Optical parts such as : LED 1 st lens, lighting lens, light guide	High transmission and cleanness, superior flow, color stability, V2
		LUX2614	7	750	Lighting, LED tube	Diffusion, internal mold release, V2, UV stabilized, F2
		LUX2114G	18	600	Lighting, LED bulb	Diffusion, internal mold release, V2, UV stabilized, F2
		LUX2289	16	600	Light reflector, light shielding parts	High light reflectance, UV stabilized, V2
		LUX9612G	7	400	Lighting, LED bulb	Diffusion, non brominated and non chlorinated FR system, V0@1.5mm
		LUX9616G	7	450	Lighting, LED bulb	Diffusion, non brominated and non chlorinated FR system, V0@1.5mm
		LUX9230T	14	800	Lighting , clear Lens, bulb	Clear, halogen-free flame retardant PC has a V0@3.05mm UL rating, UV resistance, F1
		LUX9610	7	760	Lighting , clear Lens, bulb and tube	Clear, halogen-free flame retardant PC has a V0@1.5mm UL rating, UV resistance, F2
		LUX7169 (WH8G733)	22	90	Lighting, reflector	Reflectivity, halogen-free flame retardant PC has a V0@0.9mm UL rating, UV resistance, F2
		BFL2000(U)	32	600	Lighting, reflector	Reflectivity, halogen-free flame retardant PC has a V0@1.5mm UL rating; Grade name with suffix U stands for weathering capability

LEXAN™ FLAME RETARDANT GRADES

PROCESS	SERIES	GRADE	MFR, g/10min (ASTM D 1238, 300°C/1.2kg)	IZOD IMPACT, J/m (ASTM D 256, notched, 23°C)	TYPICAL APPLICATION	CHARACTERISTICS
Injection Molding	Non-Filled, Opaque FR- PC	905	30	740	Thin wall application, electric housing	High flow, opaque, Eco FR systems with UL-94 listing of both V0@1.1mm and 5VA@2.8mm ratings.
		BPL1000	25	600	Thin wall application, battery enclosures, connectors	High flow, opaque, Eco FR systems with UL-94 listing of V0@0.8 mm rating.
		915R	18	740	Document handling, electric housings	Good flow and mold release properties. Opaque, Eco FR systems with UL-94 listing of V0@1.1mm rating.
		916R	18*	65**	Document handling, electric housings	Good flow and mold release properties. Opaque, Eco FR systems with UL-94 listing of V0@0.8mm rating. Limited to color
		925	14	800	Document handling, electric housings	Eco FR PC has an UL-94 V0@1.1mm rating flow and impact balance
		925U	14	800	Document handling, outdoor electric housings	Eco FR PC has an UL-94 V0@1.5mm rating and is UV stabilized, F1, providing additional weathering capability
		945	10	800	Adaptor, charger, battery enclosures,	Eco FR PC has an UL-94 V0@1.0mm and 5VA@3.0mm ratings, it is a general purpose resin designed to meet the needs of various applications.
		945U	10	800	Electrical housing,	Eco FR PC has an UL-94 V0@1.5mm and 5VA@3.0mm ratings , F1, it is UV stabilized, providing additional weathering capability
		955	7	800	Lighting, LED bulb	Eco FR PC has an UL-94 V0@1.5mm and 5VA@3.0mm ratings , it is a general purpose resin designed to meet the needs of various applications

*MFR - ISO1133 at 300°C/1.2kg in cm³/10min

**IZOD IMPACT - ISO180/1A at 23°C in kJ/m²

LEXAN™ FLAME RETARDANT GRADES

PROCESS	SERIES	GRADE	MFR, g/10min (ASTM D 1238, 300°C/1.2kg)	IZOD IMPACT, J/m (ASTM D 256, notched, 23°C)	TYPICAL APPLICATION	CHARACTERISTICS
Injection Molding	Non-Filled, transparent FR-PC	905AU	27	700	Thin wall application, electric housing	High flow, clear Nonbrominated, nonchlorinated FR systems with UL-94 listing of V0@2.5 mm rating
		915AU	23	650	Thin wall application, battery enclosures, connectors	High flow, clear Nonbrominated, nonchlorinated FR systems with UL-94 listing of V0@3.0 mm rating
		925A	13	800	Document handling, electric housings	Clear Nonbrominated, nonchlorinated FR systems with UL-94 listing of V0@3.0 mm rating
		925AU	13	800	Document handling, electric housings	Nonbrominated, nonchlorinated FR PC has an UL-94 V0@3.0mm rating and is UV stabilized, F1, providing additional weathering capability
		945A	10	800	Document handling, outdoor electric housings	Nonbrominated, nonchlorinated FR PC has an UL-94 V0@3.0mm rating
		945AU	10	800	Document handling, electric housings	Eco FR PC has an UL-94 V0@3.0mm rating and is UV stabilized, F1, providing additional weathering capability
		9925A	13	750	Electrical housing, thin wall FR clear application	Nonbrominated, nonchlorinated FR PC has an UL-94 V0@1.5mm rating , F1, it is UV stabilized, providing additional weathering capability
		955AU	7	800	Connectors, document handling	Nonbrominated, nonchlorinatedFR PC has an UL-94 V0@3.0mm rating and is UV stabilized, F1, providing additional weathering capability

LEXAN™ FLAME RETARDANT GRADES

PROCESS	SERIES	GRADE	MFR, g/10 min (ASTM D 1238, 300°C/1.2kg)	IZOD IMPACT, J/m (ASTM D 256, notched, 23°C)	TYPICAL APPLICATIONS	CHARACTERISTICS
Injection Molding	Glass Filled, FR-PC	505R	7	100	Connector, electric housing	Nonbrominated, nonchlorinated FR UL94 V0@1.5mm, 5VB@2.0mm, 10%GF filled 5VA@3.0 mm
		505RU	8	90	electric enclosure, connectors	Nonbrominated, nonchlorinated FR UL94 V0@1.5mm, 5VA@3.0mm, 5VB@3.0mm F1, UV resistance, 10%GF filled
		515RU	9*	10**	Document handling, electric housings	Nonbrominated, nonchlorinated FR UL94 V0@1.5mm, 5VA at 3.0mm, F1, UV resistance , higher impact, 10% GF filled
		BFL2010	15	110	Electric housings, consumer appliance	Nonbrominated, nonchlorinated FR UL94 V0@1.5mm, high flow, 10%GF filled
		BFL2015	6.5	78	Electric housings, consumer appliance	Nonbrominated, nonchlorinated FR UL94 V0@1.5mm, middle flow 15%GF filled
		3412ECR	7	110	Connector, electric housing	Nonbrominated, nonchlorinated FR UL94 V0@1.5mm, 5VA@3.0mm, F1, UV resistance, 20%GF filled
	Structural foam	FL905	3.2	520	Package, electrical enclosures	Nonbrominated, nonchlorinated FR, UL94 V0@3.0mm, 5VA@6.0mm

*MFR - ISO1133 at 300°C/1.2kg in cm³/10min

**IZOD IMPACT - ISO180/1A at 23°C in kJ/m²

LEXAN™ PC FOR HEALTHCARE

PROCESS	SERIES	GRADE	MFR, g/10min (ASTM D 1238, 300°C/1.2kg)	IZOD IMPACT, J/m (ASTM D 256, notched, 23°C)	TYPICAL APPLICATIONS	CHARACTERISTICS
Injection Molding	ETO	HP1HF	39	687	Healthcare application	Biocompatible (ISO10993 or USP Class VI) Contains mold release, high flow
	ETO& Autoclave	HP1	25	640	Medical devices and pharmaceutical applications	Biocompatible (ISO10993 or USP Class VI) Contains mold release
		HP2	17.5	694	Medical devices and pharmaceutical applications	Biocompatible (ISO10993 or USP Class VI) Contains mold release
		HP4	10.5	801	Medical devices and pharmaceutical applications	Biocompatible (ISO10993 or USP Class VI) Contains mold release
	Gamma ETO Autoclave	HPS1	25	640	Medical devices and pharmaceutical applications	Biocompatible (ISO10993 or USP Class VI) Contains mold release
		HPS2	17.5	694	Medical devices and pharmaceutical applications	Biocompatible (ISO10993 or USP Class VI) Contains mold release
		HPS4	10	840	Medical devices and pharmaceutical applications	Biocompatible (ISO10993 or USP Class VI) Contains mold release
		HPS6	7	907	Medical devices and pharmaceutical applications	Biocompatible (ISO10993 or USP Class VI) Contains mold release
		HPS7	5	935	Medical devices and pharmaceutical applications	Biocompatible (ISO10993 or USP Class VI) Contains mold release Lipid resistance

SABIC® PC RESIN (POLYCARBONATE)

PROCESS	SERIES	GRADE	MFR, g/10min (ASTM D 1238, 300°C/1.2kg)	IZOD IMPACT, J/m (ASTM D 256, notched, 23°C)	TYPICAL APPLICATIONS	CHARACTERISTICS
Injection Molding	General Purpose	PC1000R	10	800	Wall plate, switch, home appliance	Middle flow; Heat stabilized; Internal mold release
		PC1003R	10	800	Electric meter; Lighting	Middle flow, heat and UV stabilized, internal mold release
		PC2200R	22	600	Fan, small home appliance; Lighting	High flow, heat stabilized; Internal mold release
	FDA	PC1004R	10	800	Home appliance, food processor, toy, food disposable	Middle flow product, with internal mold release, FDA food contact compliant
	Auto Lighting	ALS01	12	800	Automotive Lens	Middle flow product, UV stabilized
	Optical Media	PC5800	58	150	Media market: DVD,CD	Super high flow
Extrusion	General Purpose	PC0703R	7	900	Sheet	Low flow, heat and UV stabilized, internal mold release
Compounding	General Purpose	PC0700	7	900	Compounding	Low flow, heat stabilized

VALOX™ RESIN PBT (POLYBUTYLENE TEREPHTHALATE)

PROCESS	SERIES	GRADE	IZOD IMPACT, J/m (ASTM D 256, notched, 23°C)	FLEXURAL MODULUS, MPa (ASTM D 790, 1.3 mm/min, 50 mm span)	TYPICAL APPLICATIONS	CHARACTERISTICS
Injection Molding	Standard	325	53	2340	Sprinklers and nozzles, pumps, door handle, tank covers, pens, pencils	Unreinforced; Improved processing
		420	110	8000	Appliance handles, spotlights, electric motors	30% GF, excellent strength, stiffness and dimensional stability
	Impact modified	V3004	51	2300	Flexible hinge, automotive connectors, film applications	Unfilled impact modified PBT
		VIC4311	137	6080	Automotive underhood applications such as ignition coil housings	30% GF, impact modified PBT with excellent epoxy adhesion
	Metallizable	V2000DM	46	2570	Automotive lighting bezel	Unreinforced, directly metallizable PBT resin
		EH7020	32	4130	Automotive bezel applications	Mineral filled, Metallizable, PBT
	FDA / Food Contact	325FC	38	2340	Kitchenware applications	FDA / Food Contact , PBT
	Low warpage	508	96	6890	Appliance handles, spotlights, electric motors	30% GF filled PBT/PC, excellent mechanical and thermal performance
	Low warpage + weatherable	VX4920	80	5500	Connectors and automotive industry	20% GF, nucleated PBT/ASA blend with excellent mechanical properties
	High Heat + Aesthetics	830	90	7400	Hot air gun housing assemblies, industrial glue guns, appliance housings and handles	30% GF PBT/PET, excellent surface finish
	Hydrostable	K4560	96	7200	Automotive applications	30% GF PBT, Impact modified, high flow, hydrolytically stable
	Healthcare	HX420HP	85	7580	Medical devices and pharmaceutical applications	Medium flow, 30% GF PBT

VALOX™ RESIN FLAME RETARDANT PBT&PET BLENDS

SERIES	GF%	GRADE	FR RATE(UL 94) MVR, cm ³ /10min (250°C/5.0 kg)	FLEXURAL MODULUS,MPa (ASTM D 790, 1.3 mm/min, 50 mm span)	TYPICAL APPLICATIONS	CHARACTERISTICS
PBT/PC	0	357X(U)	V0@0.75mm, 5VA@2.5mm, MVR8	2060	Connector, electronic housings	Weatherable,F1
	0	V3900WX*	V0@1.5mm 5VA@3.0mm, MVR11	2200	Battery enclosure, electronic housing	Weatherable,F1
	10	4512	V0@0.75mm , MVR 30	3400	Electric motors, connector	Impact modified
	30	553	V0@0.8mm, MVR20	9400	Electric motors, connector	Lower warpage
PBT/PET	15	855	V0@1.5mm, MVR32	5200	External housings, steam irons, appliance housings and lighting parts	Improved surface appearance
	30	865	V0@1.7mm, MVR23	8000	External housings, steam irons, appliance housings and lighting parts	Flame retardant PBT+PET blend with an excellent surface appearance
PBT	0	310SE0	V0@0.71mm, 5VA@3.0mm, MVR15	2620	Electrical industry, bobbins, components and appliance housings	Standard
	6.5	457	V0@0.71mm, MVR30	3700	Electrical and appliances industries	Standard
	17	DR48	V0@0.9mm, MVR40	5200	Lamp sockets, connectors, switches	Standard
	20	4521	V0@0.75mm, 5VA@2.0mm,MVR65	6500	Electrical applications	Electrical/CTI
	30	420SE0	V0@0.7mm, 5VA@2.0mm, MVR29	9800	Edge trimmers, food mixer motor stator and commutator, cooling fan	Standard
	30	4631	V0@0.75, MVR40	9000	Edge trimmers, food mixer motor stator and commutator, cooling fan	Electrical/CTI
	30	V4760	V0@0.3mm, MVR28	9500	Electrical applications	Thin wall brominated FR, high flow, high CTI
	30	V4860HR	V0@0.8mm , MVR12	6740	Electrical and medical application	Hydrolytically stable, Impact Modified
	35**	771	V0@0.75mm, 5VA@2.0mm, MVR8	7900	Electrical applications	Electrical/CTI

*MVR test condition: 265°C, 2.16 kg

**Glass filled/mineral filled

CYCOLACT™ RESIN ABS (ACRYLONITRILE BUTADIENE STYRENE)

PROCESS	SERIES	GRADE	IZOD IMPACT, J/m (ASTM D 256, notched, 23°C)	HDT, °C (ASTM D 648, 1.82 MPa, 3.2mm, unannealed)	TYPICAL APPLICATIONS	CHARACTERISTICS
Injection Molding	General Purpose	MG47 (F/N)	320	80	Home appliance, Toy, Business equipment	General purpose, medium impact, balanced flow; Grade name with suffix F stands for FDA compliant; Grade name with suffix N stands for NSF compliant
		MG94(F)	240	82	Large size and thin wall applications	High flow, impact Grade name with suffix F stands for FDA compliant
	Flame Retardant	FR15	213	70	Electronic housing, switches, computer equipment	V0 at 1.5mm, balanced property
	High Heat	X11	320	86	Automotive interior, rear lighting housing, rear mirror housing; Warm air blower	HDT 90°C, balanced flow/ impact
		DL200H	620	96	Automotive interior, rear lighting housing, rear mirror housing; warm air blower	HDT 101°C, medium impact
	Healthcare	HMG47MD	320	82	Medical disposable, housing, handles, drain bases	Flow/impact balanced. Biocompatible. Healthcare
		HMG94MD	240	82	Medical disposable, housing, handles, drain bases	High Flow; Biocompatible; Healthcare
	Plating	MG37EPX	250	76	Automotive front grill, name plate, decoration strip; Bathroom accessory	General purpose easy plating
	SAN	INP576	21	87	Drink cup; houseware; polymer compounding	Middle Flow, FDA
Extrusion	Extrusion	EX58 (F)	432	76	Sheet extrusion, trunk & suitcase shin	High Impact; Grade name with suffix F stands for FDA compliant

GELOY™ RESIN ASA (ACRYLIC STYRENE ACRYLONITRILE)

PROCESS	SERIES	GRADE	IZOD IMPACT, kJ/m ² (ISO 180/1A, notched 80*10*4, +23°C)	MFR, g/10min (ASTM D 1238, 220°C/10kg)	TYPICAL APPLICATIONS	CHARACTERISTICS
Injection Molding	General Purpose	CR8510	15	6.3	Automotive front grill, external rear mirror housing, rear light housing, center high mounting stop lamp, spoiler	High heat resistance, F1 listing, especially for automotive parts
		CR7520	9	7	Automotive, transportation, marine, sport leisure equipment	Standard heat, high flow, F2
		CR7500	15	6.3	Automotive, transportation, marine, sport leisure equipment	Optimum flow impact balance. Auto spec
	Extreme Weather- ability	XTWM206	15	8.8	Automotive front grill, Building & Construction applications, Sport & leisure equipment	Extreme weatherability, F1 listing, high stiffness
Extrusion	General Purpose	CR7020	32	7	Cap -stock for roof tile, siding, window profile and fence, multiple layer sheet	Medium gloss, high impact, F2 rating
	Extreme Weather- ability	XTWE270M	13	9.7	Window profile cap- stock	High gloss, extreme weatherability, suitable for PVC co-extrusion
		XTWE480	5	38	Window profile cap - stock	High gloss, scratch resistance, suitable for PVC co-extrusion

GELOY™ RESIN PC/ASA

PROCESS	SERIES	GRADE	IZOD IMPACT, kJ/m ² (ISO 180/1A, notched 80*10*4, 23°C)	VICAT SOFTENING TEMP, °C (ISO 306, B/120)	TYPICAL APPLICATIONS	CHARACTERISTICS
Injection Molding	General Purpose	XP4025	15	107	Consumer appliances housing, transporation panel, automotive, outdoor device housing	Cost balanced
		XP4034	33	109	Automotive external/inner rear mirror housing, roof rack trim, lift gate/decklid handle housing, license plate frame	High heat resistance, middle impact, F2 rating
		XP4020R	na	na	Consumer appliances housing, transporation panel, automotive, outdoor device housing	High flow, 20% Post industrial recycle
	Flame Retardant	HRA222 (F)	17	104	Coffee machine, switch panel, medical device, telecom device	Non-Br/Cr FR, V0@2 mm, 5VB@2 mm, Grade name with suffix F stands for UL94 F1 rating
		XTPMFR10	13	98	Consumer appliances housing, transporation panel, automotive, outdoor device housing	Non-Br/Cr FR, V0@1.0 mm, 5VB@2 mm

CYCOLOY™ RESIN PC/ABS

PROCESS	SERIES	GRADE	IZOD IMPACT, J/m (ASTM D 256, notched, 23°C)	MFR, g/10min (ASTM D 1238, 260°C/5kg)	TYPICAL APPLICATIONS	CHARACTERISTICS
Injection Molding	Non-FR general purpose	C1200HF	587	19	Automotive interior & exterior, lighting, consumer electronic, telecommunication	High heat, high impact
		HC1204HF	580	24	Medical equipment and device	Healthcare biocompatible (ISO 10993, USP class VI compliance)
		LG9000	534	17	Automotive interior	Low gloss
		MC1300	534	14	Automotive door handle, front grill, name plate, decoration strip; Bathroom accessory	Plating grade, excellent flow and impact
		CP8320	600	14	Automotive, door handle, front grill, name plate, decoration strip; Bathroom accessory	Plating grade, medium heat
		XCY620	640	17	Automotive interior & exterior	Excellent properties retention after Hydrolytic and Heat Aging
		XCY620S	680	23	Automotive interior & exterior	Good flow/heat/impact balance. Only available in limited standard colors and for large order quantity

CYCOLOY™ PC/ABS AND PC BLENDS FLAME RETARDANT GRADES

PROCESS	SERIES	GRADE	MFR	IZOD IMPACT, J/m (ASTM D 256, notched, 23°C)	TYPICAL APPLICATIONS	CHARACTERISTICS
Injection Molding	Non-Filled, FR-PC/ABS &PC blend	C6600*	21	550	Document handling, consumer appliance	Nonbrominated, nonchlorinated FR V0@1.5mm, 5VB@2mm, hydrostable
		CY6110*	23	475	Document handling, electrical housing	Nonbrominated, nonchlorinated FR V0@1.5mm, 5VB@2.5mm, high hydrostable, high flow and high impact
		CY6310*	20	600	Document handling, electric housings	Nonbrominated, nonchlorinated FR V0@1.5mm, 5VA@2.9mm, 5VB@2.3mm , high impact, heat, flow
		CY6414**	14	795	Electric housings; Adaptor& chargers	Nonbrominated, nonchlorinated FR V0 @1.2mm, 5VB@2.5mm, High Heat, Impact Modified PC blend
		CY6120*	18	587	Electric housings, consumer appliance	Nonbrominated, nonchlorinated FR V0@1.2mm
		CY6025*	28	370	Document handling, electric housings	Nonbrominated, nonchlorinated FR V0@1.2mm, 5VB@1.5mm, high flow
Extrusion	Non-Filled, FR-PC/ABS &PC blend	CE3510***	8	664	Cable, profile	Nonbrominated, nonchlorinated FR V0@1.5mm, halogen free according to DIN VDE 0472/815 for cable channels; Compliance to IEC1386-1 & EN50085/86

CYCOLOY™ PC/ABS AND PC BLENDS FLAME RETARDANT GRADES

PROCESS	SERIES	GRADE	MFR, g/10min (ASTM D 1238, 260°C/5kg)	IZOD IMPACT, J/m (ASTM D 256, notched, 23°C)	TYPICAL APPLICATIONS	CHARACTERISTICS
Injection Molding	Filled , FR PC/ABS	CM6140*	17.5	200	Electric housing	3.3 GPa, Vicat 91°C Nonbrominated, nonchlorinated FR V0 @ 0.8mm, V1@ 0.6mm 5VB@ 1.5mm
		CM6240*	16.5	86	Electric housing	4.4 GPa, Vicat 97°C, Nonbrominated, nonchlorinated FR V0 @ 0.8mm 5VB@ 1.5mm
		C7230P*	13	69	Electric housing	4.5 GPa, Vicat 108°C Nonbrominated, nonchlorinated FR V0 @ 1.2mm , 5VB@ 2.0mm
Injection/ Extrusion/ Thermoforming		CM6210**	11.5	500	Electric housing sheet extrusion	3.5 GPa, Vicat 106°C Nonbrominated, nonchlorinated FR V0 @ 1.5 mm

*MFR at 260°C/2.16 kg in g/10 min

**MFR at 260°C/5 kg in g/10 min

***MVR at 260°C/5kg in cm³/10 min

Vicat B/50- ASTM1525 & ISO306

XENOY™ RESIN PC/PBT

PROCESS	SERIES	GRADE	IZOD IMPACT, J/m (ASTM D 256, notched, 23°C)	HDT, °C (ASTM D 648, 1.82 MPa, 3.2mm, unannealed)	TYPICAL APPLICATIONS	CHARACTERISTICS
Injection Molding	General Purpose	5220U	710	84	Recreation & Agriculture equipment, Handset housing & accessory, Power tools, CE handset accessory, housing	Chemical & UV resistance, Low temperature ductility, Molded-in-color
		CL100	700	90	Heavy trucks (body panels)	Chemical resistance, Low temperature ductility, Molded-in-color, Good paint adhesion
	Weather- ability	1731	667	93	Exterior components (door handles), CE wearables (athletic trackers)	Impact/Chemical resistance; Molded-in-color
	Low Temp Ductility	6620(U)	801	53	Gas tanks, Irrigation sprinklers, Packaging	Chemical & UV resistance, barrier to fuel, molded-in-color ; Grade name with suffix U stands for weathering capability
		5720(U)	722	83	Recreational & Ag equipment, Packaging	Chemical & UV resistance, LT ductility ("Best-in-class"), Molded-in-color. Grade name with suffix U stands for weathering capability
		1102	801	90*	Energy Absorbers, bumper beam	Excellent low temperatue impact/chemical resistance to automotive fluids
		1105	755	97*	Energy Absorbers, bumper beam	Impact modified, excellent toughness at low temperatures, very good paintability
	High Heat	X2500UV	600	108	Heavy trucks (body panels)	Chemical resistance, Low temperature ductility, Molded-in-color, Good paint adhesion, Improved heat (vs CL100)
Injection Molding	Filled PC/PBT	X6320	45	88	Painted door handle	10% mineral; Good surface finish and ease of process
		X5230	8**	100***	Automotive and OVAD	15% Talc filled , good surface appearance for painted solutions
		6370	170	148	Automotive and OVAD	30% glass fiber. Impact modified/toughness
	HMD (High Modulus Ductile)	X4830	600	106	Outdoor equipment, door handle, flexible hinges, shoe caps	Hydrostable, high modulus, low temperature ductile
		X4850	180	101	Outdoor equipment, door handle, flexible hinges, shoe caps	12% mineral; Hydrostable, high modulus, high ductile

* HDT Part thickness 6.4mm

** IZOD IMPACT - ISO100/1A in kJ/m²

***HDT - ISO75/Ae

XYLEX™ RESIN PC/PET ALLOY

PROCESS	SERIES	GRADE	MFR,g/10min (ASTM D 1238, 265°C/ 2.16kg)	IZOD IMPACT, J/m (ASTM D 256, notched, 23°C)	TYPICAL APPLICATIONS	CHARACTERISTICS
Injection Molding	Consumer Electronics	X7300(CL)	21	660	Mobile phones cover and lens,peripherals &device	Transperent, chemical resistance, low temperature processing. Grade name with suffix CL stands for clean
		X8210	10	800		Transperent,Chemical resistance, low temperature processing.
	General Purpose	X8409AC	4	854	Power tools, others	High viscosity and melt strength, extrusion, blow moldable, selective Plating
		X7507	8	990	Pool Spa	Transparent, UL F1 performance; Chemical resistance vs pool cleaners
		X8300	15	1120	Personal consumer (safety, sunglasses) Eye ware	Transparent, high chemical resistance
		X7509HP	12	850	Consumer Housewares Food service	Transparent, better flow (vs Standard PC), excellent selective plating, FDA
	Healthcare	HX8300HP	15	1120	Medical Equipment and Delivery Devices	Transparent, high chemical resistance, better flow (vs Standard PC); Biocompatible
		HX7509HP	12	854		Transparent, chemical resistance, lower cost, Biocompatible

POM (POLYOXYMETHYLENE)

REMARKS: NOT ALL POM GRADES ARE AVAILABLE IN ASIA. PLEASE CHECK WITH US FOR THE PRODUCT AVAILABILITY IN SPECIFIC COUNTRIES.

PROCESS	GRADE	MELT INDEX g/10min (ISO1133, 190°C/ 2.16kg)	DENSITY (g/cm ³)	TYPICAL APPLICATIONS	CHARACTERISTICS
Extrusion Molding	30RE	2.8	1.41	Thick -walled, void - free molded parts, Extruded stock shapes	Stiff-flowing copolymer POM grade suitable for injection molding and extrusion. Good chemical resistance to solvents, fuel and strong alkalis as well as good hydrolysis resistance
Extrusion Molding	30S	3	1.41	Thick - walled, void - free parts used for automotive parts like door handles, sheet, rods and tubing	Stiff flowing copolymer POM grade suitable for injection molding and extrusion. High impact toughness. Good tracking resistance over range of temperature
Injection Molding	90S	9	1.41	Wide range of plumbing products, camera gears and toys	General purpose standard injection molding grade. High rigidity, tough and hardness
	140S	14	1.41	Precision parts and thin - walled moldings, fuel systems parts, Zippers	Easy flowing Injection molding type for precision molded parts and thin-walled molded parts with high rigidity. High toughness and hardness
	280S	27	1.41	Complicated precision parts, thin-walled moldings multicavity molded goods like gears, sprinkler systems and shower heads	Very easy flowing injection molding grade. High rigidity and hardness
	460S	45	1.41	Complicated, thin -walled precision parts, water flow meter	Extremely easy flowing injection molding grade for thin-walled precision molded parts with intricate flow-path-wall thickness relation. Permits processing at reduced temperature and shorter cycle times

SABITAL™ POM COMPOUND

PROCESS	GRADE	MELT INDEX cm ³ /10min (ISO1133, 190°C/ 2.16kg)	DENSITY (g/cm ³)	TYPICAL APPLICATIONS	CHARACTERISTICS
Injection Molding	90GV10	4.5	1.48	Molded parts requiring high strength, stiffness, hardness and wear resistance	Good flow and combination of strength, stiffness. Good Dimensional Stability
	90GV20	2.5	1.57	Molded parts requiring high strength, stiffness, hardness and wear resistance	Moderate flow with higher strength, stiffness, hardness and high HDT. Good dimensional stability
	90GV30	3	1.60	Molded parts requiring high strength, stiffness, hardness and wear resistance	Combination of very high strength, very high stiffness, hardness and high HDT. Good dimensional stability

PMMA (POLYMETHYL METHACRYLATE)

PROCESS	GRADE	MELT INDEX (g/min) (ISO1133, 230°C/ 3.8kg)	DENSITY (g/cm ³)	TYPICAL APPLICATIONS	CHARACTERISTICS
Extrusion, Molding, Thermoforming	17OP	1.7	1.19	Used in monitor LGP (Light Guide Plate) e.g.TVs and LCDs	An optical LGP extrusion grade an optical extrusion grade characterized by low foreign-matter account (MRC test method) and low UV absorbance (<70 ppm)
Extrusion, Molding, Thermoforming	20HR	2	1.19	Heat resistance grade used for e.g. tail light	Heat resistance grade, characterized by high temperature of deflection under load (≥ 98 °C) and high Vicat softening temp (≥ 105 °C) is a standard PMMA grade is largely divided in to extrusion and injection molding purpose
Extrusion, Molding, Thermoforming	23SP	2.3	1.19	Used for sheet extrusion with a wide range usage out door, e.g. signage	Special extrusion grade. The balance of melt flow rate and temperature of deflection under load is convenient for extrusion
Injection Molding	14OHF	14	1.19	Used for injection molding applications such as cups and salad bowl	Easy flowing grade for Injection molding with high flow (MI ≥ 10). Good moldability

FORTIFY™ POE (POLYOLEFIN ELASTOMER)

PROCESS	GRADE	MI,g/10min (190°C, 2.16kg)	DENSITY (g/cm³)	TYPICAL APPLICATIONS	CHARACTERISTICS
Compounding Foaming Extrusion	C0570(D)	0.5	0.868	<ul style="list-style-type: none"> Impact modification for automotive components (Car bumpers, auto interiors, dashboard, Instrument panel, and door trims) Footwear Wire & cable Grafting POE for polyamide modification 	<ul style="list-style-type: none"> C8 comonomer Exceptional toughness, flexibility and elasticity Excellent impact strength and low temperature ductility Excellent organoleptic and low volatile and migration High filler loading Light weight Easy processing <p>Grade name with suffix D contains anticaking agent</p>
	C1055D	1	0.857		
	C1070(D)	1	0.868		
	C1085	1	0.885		
	C3080	3	0.880		
	C5070(D)	5	0.868		
	C13060(D)	13	0.863		
	C30070D	30	0.868		

BR (POLYBUTADIENE RUBBER)

PROCESS	GRADE	MV ML(1+4) @100°C	CIS 1,4 (%)	APPLICATIONS	CHARACTERISTICS
Extrusion Molding Calendering	4010	40 +/- 5	96 Min	<ul style="list-style-type: none"> Tire tread, sidewall and carcass conveyor belt coverings Shoe sole, hoses and tube covers Mechanical and sporting goods 	<p>Low Mooney grade generally used in blends with other elastomers and is designed for</p> <ul style="list-style-type: none"> Good abrasion resistance Excellent flex cracking resilience Good low temperature properties Low cold flow property Excellent filler dispersion and shorter mixing cycles Low die-swell and good dimensional control
Extrusion Molding Calendering	4610	46 +/- 5	96 Min		<p>Medium Mooney grade generally used in blend with other elastomers and is designed for</p> <ul style="list-style-type: none"> Excellent abrasion resistance Excellent flex cracking resistance Excellent resilience Good low temperature properties Low rolling resistance
Extrusion Molding Calendering	5510	55 +/- 5	96 Min		<p>High Mooney grade generally used in blend with other elastomers and is designed for</p> <ul style="list-style-type: none"> Excellent abrasion resistance Excellent flex cracking resistance Excellent resilience Good low temperature properties Low rolling resistance
Extrusion Molding Calendering	4510	45 +/- 5	96 Min		<p>Medium Mooney grade generally used in blends with other elastomer and is designed for</p> <ul style="list-style-type: none"> Good abrasion resistance Excellent resilience and flex-cracking resistance Good low temperature properties Low cold flow tendency Good processibility Excellent filler dispersion and short mixing time

EPDM (ETHYLENE PROPYLENE DIENE RUBBER)

PROCESS	GRADE	MV ML(1+4) @125°C	ENB%	C2%	APPLICATIONS	CHARACTERISTICS
Extrusion Molding	756	72	5.0	69	Auto coolant/air hose, building profiles, industrial hoses, weather seals, wire & cable, TPV	Exhibits smooth and fast extrusion with tensile strength, compression set, and flexibility
	855	80	5.2	55	Automotive weatherseals, auto coolant / air hoses, industrial gaskets and O rings for pipes / hoses, and washing machine gasket, TPV	Fast mixing, extrusion, molding, and cure rate with good compression set properties at low and high temperature
	657	60	5.0	73	Extruded profiles, Automotive weatherseals, gaskets and seals, low voltage wires and cables insulation, TPV	Excellent processability; mixing, mill handling, tensile strength, tear strength, compression set, and flexibility
Molding	245	25	4.5	50	Brake parts, molded foam sheets, precision seals, electrical connectors, gaskets, and hose mandrels, shoe sole	Fast cure rate and high cure state with good low temperature flexibility and compression set properties
Calendering	626	67	2.8	69	Sheets, water management liners, and roof membranes, shoe sole	Good calenderability, mixing, tensile strength, compression set, and flexibility

POLYOLEFIN COMPOUND

PROCESS	GRADE	MI,g/10min (190°C, 2.16kg)	DENSITY (g/cm ³)	TYPICAL APPLICATIONS	CHARACTERISTICS
Pipe	P1600A	2.1(MI5) 28.3 (MI21)	0.892	Inner layer for industrial and mining pipes	Natural color High abrasion resistance, good processability and good compatibility with HDPE pipes

**DATA IN TABLE ARE TYPICAL VALUES
AND SHOULD NOT BE CONSTRUED AS
SPECIFICATION LIMITS**

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CONTACT US

SABIC

HQ

PO Box 5101, Riyadh 11422
Saudi Arabia
T +966 (011) 225 8000
F +966 (011) 225 9000
E info@sabic.com

EUROPE

PO Box 5151
6130 PD Sittard,
The Netherlands
T +31 467 222 222
F +31 467 220 000
E info@sabic-europe.com

AMERICAS

2500 City West Boulevard
Houston, TX 77042 USA
T +1 713-430-2301

ASIA

GREATER CHINA

2550, Xiupu Road
Pudong Shanghai 201319, China
T +86 21 2037 8188
F +86 21 2037 8288
E stcl-sha@sabic.com.cn

REST OF ASIA

One Temasek Avenue
06-01 Millenia Tower
Singapore 039192
T +65 655 725 55
F +65 653 181 01
E sappl@sabic.com

INDIA

10th Floor, Ambience Corporate Towers II
Ambience Island,
Gurgaon 122001
Delhi, India
T +91 124 4746191
M +91 9599116053

JAPAN

Tokyo Club Building, 7F
Kasumigaseki 3-2-6, Chiyoda-ku
Tokyo 100-0013, Japan
T +81 3 3593 4700
F +81 3 3593 4707
E sjl@sabic.co.jp

KOREA

20th floor, Donghoon Tower
702-19, Yeoksam-dong
Kangnam-ku
Seoul 135-513, South Korea
T +82 2 510 6000
F +82 2 510 6666
E skl@sabic.co.kr

INDONESIA

Indonesia Stock Exchange Building
Suite 1702, Tower 1, Level 17
Jalan Jend
Sudirman Kav. NO. 52-53
Jakarta 12190, Indonesia
T +62 215 140 0055
F +62 215 140 0077
E sappl-iro@sabic.co.id

MALAYSIA

Suite 3B-11-3, Level 11
Block 3B, Plaza Sentral
Jalan Stesen Sentral 5
KL Sentral, 50470
Kuala Lumpur, Malaysia
T +60 322 746 198
F +60 322 733 487
E sappl@sabic.com

PHILIPPINES

T +63 917 529 8791
E sappl@sabic.com

THAILAND

36th Floor CRC Tower, All Season Place
87/2 Wireless Road, Lumpini
Rhathumwan, Bangkok 10330, Thailand
T +66 62 414 6955
E sappl@sabic.com

VIETNAM

Unit 3, Level 40
Bitexco Financial Tower,
02 Hai Trieu Street
Ben Nghe Ward, District 1
Ho Chi Minh City, Vietnam
T +84 839 141 010
F +84 839 142 088
E sappl-vro@sabic.com.vn

AUSTRALIA AND NEW ZEALAND

T +61 417 852 914
E sappl@sabic.com