

# QUALITY+ PERFORMANCE

POLYMER PRODUCT CATALOGUE



HDPE (High-Density Polyethylene)

Process	Grade	MI, g/10 min	Density, g/cm <sup>3</sup>	Typical Application	Characteristics
		ASTM D-1238 (* ISO 1133)	ASTM D-1505 (# ISO 1183)		
Blown Film	F00952	0.05 (MI <sub>2.16</sub> ) 9 (MI <sub>21</sub> )	0.952	Bags-on-roll, T-shirt bag, Shopping bag	Excellent processability, mechanical strength & rigidity J - Grade with TNPP free additive
	FJ00952/ F00952J	0.05 (MI <sub>2.16</sub> ) 9 (MI <sub>21</sub> )	0.952		
	F01552	0.15 (MI <sub>2.16</sub> ) 16 (MI <sub>21</sub> )	0.952	Strong strength millinery & Notion bags, deep freeze bags	Excellent processability & drawdown
	F04660	0.7 (MI <sub>2.16</sub> ) 46 (MI <sub>21</sub> )	0.961	Core-layer in co-extruded film	Low gel, excellent water vapor barrier property, high stiffness & good processability
Blow Molding	ICP4507S	6.0 (MI <sub>21.6</sub> )	0.945	Intermediate Bulk Containers (IBC)	Good impact resistance Superior ESCR Good flow ability Broad molecular wright distribution
	BM1052J	0.38 (MI <sub>5</sub> ) 10 (MI <sub>21</sub> )	0.952	Jerry Cans	Excellent ESCR & Process ability mechanical strength
	B5428	0.3	0.954	Small and medium size containers for household and industrial chemicals	High stiffness Good impact strength Good Environmental Stress-Cracking Resistance (ESCR)
	B5429	0.3 (MI <sub>2.16</sub> ) 29 (MI <sub>21</sub> )	0.954	Industrial liner	Good processability, ESCR & mechanical properties
	B5429A	0.3 (MI <sub>2.16</sub> ) 29 (MI <sub>21</sub> )	0.954	Container for detergents, cosmetics and others	Antistatic grade to prevent dust contamination for better appearance
	B4660	46 (MI <sub>21</sub> )	0.961	Bottles for milk, fruit juice & dairy products	A homopolymer with Low smell & odor and It is primarily designed for imparting high rigidity, toughness and good processability
	B4660AB	0.7 (MI <sub>2.16</sub> ) 46 (MI <sub>21</sub> )	0.961	Drinking water bottle	A homopolymer with Outstanding organoleptic properties and It is primarily designed for imparting high rigidity, toughness and good processability.
	BM6246LS	0.7 (MI <sub>2.16</sub> ) 46 (MI <sub>21</sub> )	0.961	Bottles for milk, fruit juice & dairy products	A homopolymer and It is primarily designed for imparting high rigidity, toughness and good processability These unique properties offer the possibility to reduce weight at very good top load strength. This grade also is intended to meet customer specifications in respect of purity, healthiness and organoleptics

HDPE (High-Density Polyethylene)

Process	Grade	MI, g/10 min	Density, g/cm <sup>3</sup>	Typical Application	Characteristics
		ASTM D-1238 (* ISO 1133)	ASTM D-1505 (# ISO 1183)		
Injection Molding	M40053S	4 (MI <sub>2.16</sub> )	0.953	Bottle cap, case, crate, tray, pail, dust bin, shipping containers & housewares	High stiffness & toughness Good ESCR properties Contains UV stabilizer
	M40055S	4 (MI <sub>2.16</sub> )	0.955		Good Impact Resistance Good ESCR Good Flow ability Low Warpage
	CC453	4 (MI <sub>2.16</sub> )	0.953		Good mechanical, ESCR & organoleptic properties
	CC860	7 (MI <sub>2.16</sub> )	0.957		Low warpage Excelent ESCR Good flow ability
	M40060	4 (MI <sub>2.16</sub> )	0.960		Good toughness & rigidity
	M40060S	4 (MI <sub>2.16</sub> )	0.960		Contains UV stabilizer
	M80054	7 (MI <sub>2.16</sub> )	0.954	Caps and closures	Easy processing High rigidity Good impact strength
	M80063S	8 (MI <sub>2.16</sub> )	0.964		Good rigidity, toughness and warp resistance Good Flow ability
	M80064	8 (MI <sub>2.16</sub> )	0.964		High toughness & rigidity, low warpage
	M80064S	8 (MI <sub>2.16</sub> )	0.964		Contains UV stabilizer
	M200050	17 (MI <sub>2.16</sub> )	0.954	Crates and Molded cases & Trash cans and lids	Easy processing High rigidity Good impact strength
	M200056	20 (MI <sub>2.16</sub> )	0.956		Good flow ability and high stiffness
	M300054	30 (MI <sub>2.16</sub> )	0.954		

Multimodal HDPE

Process	Grade	MI, g/10 min	Density, g/cm <sup>3</sup>	Typical Application	Characteristics
Blown Film	F00851/ F00851A	0.30 (MI <sub>5</sub> ) 9 (MI <sub>21</sub> )	0.952	Grocery sacks, shopping bags, refuse bags, thin films for bag on roll, wrapping film	Good processability, High film strength & stiffness
	FI0750	0.22 (MI <sub>5</sub> ) 7.5 (MI <sub>21</sub> )	0.950		
	FI1157/ FI1157A	0.35 (MI <sub>5</sub> ) 11 (MI <sub>21</sub> )	0.957		
Blow Molding	B5308	8 (MI <sub>21.6</sub> )	0.953	Floating barrel and storage tanks	Multimodal grades Good ESCR Stiffness & process ability
	B5822	1.2 (MI <sub>5</sub> ) 22 (MI <sub>21</sub> )	0.958	Containers for consumer goods, detergents up to 5 L	Multimodal Grades, Good ESCR, Stiffness & processability
	B1054	0.45 (MI <sub>5</sub> ) 9.5 (MI <sub>21</sub> )	0.954	Standard Jerry cans, food contact approved MBM containers up to 30L	
	B5403	2.6 (MI <sub>21</sub> )	0.954	TH & OH Standard drums for packaging dangerous chemicals up to 220L. Food grade approved	
	B5428	0.3	0.954	Small and medium size containers for household and industrial chemicals	High stiffness Good impact strength Good Environmental Stress-Cracking Resistance (ESCR)
Injection/ Compression Molding	CC027SL	0.8 (MI <sub>2.16</sub> )	0.953	Highly carbonated drinks & light closures	Contains slip agent Weight reduction, excellent mechanical performance & compliance with food safety
	CC027C	0.8 (MI <sub>21</sub> )	0.954	Highly carbonated drinks & light closures	Weight reduction, excellent mechanical performance & compliance with food safety
	M80060	8 (MI <sub>2.16</sub> )	0.960	Crates and Molded cases, Housewares & Industrial pails	Easy to process Good rigidity, toughness and warp resistance Good Flow ability

LLDPE (Linear Low-Density Polyethylene)

Process	Grade	MI, g/10 min @190oC, 2.16kg	Density, g/cm <sup>3</sup>	Typical Application	Characteristics
		ASTM D-1238	ASTM D1505/ D4883		
Blown Film	518N/NJ	0.5	0.918	Heavy duty film, construction film	High strength & puncture resistance, J-TNPP free No slip & antiblock
	118WJ	1.0	0.918	Frozen food, carrier bags, Garbage bags, Agriculture film, shipping sacks, drip laterals	High slip & high antiblock
	118LJ	1.0	0.918		Medium slip & high antiblock
	118ZJ	1.0	0.918		Medium slip & medium antiblock
	118NJ	1.0	0.918		Without slip & antiblock
	119NJ	1.0	0.919	Shipping sacks, ice bags, frozen food bags, stretch wrap film, produce bags, liners, carrier bags, garbage bags, agricultural films, Multilayer film for food & non-food packaging	Good puncture resistance, high tensile strength and good hot tack properties
	119ZJ	1.0	0.918		Grade contains Slip & Antiblock, Good puncture resistance, high tensile strength and good hot tack properties.
	120WJ/ 121WJ	1.0	0.918	High clarity thin film, laundry bags, bread bags	High clarity. High slip &antiblock
	122NJ				
	122WJ				
	118WJ	2.0	0.918	General purpose film, garment bag, garbage bag, laminated and coextruded film	High slip & high antiblock
	128NJ	2.0	0.918		Without slip &antiblock
	219ZJ				
	219NJ				
	222WJ				
	6821NJ	0.8	0.921	Heavy duty shipping sacks, lamination films, Ice & frozen food bags, agricultural films, stretch wrap films	Fractional melt index hexene copolymer High toughness & puncture resistance and good sealing characteristics and tear resistance

LLDPE (Linear Low-Density Polyethylene) (Cont)

Process	Grade	MI, g/10 min @190oC, 2.16kg	Density, g/cm <sup>3</sup>	Typical Application	Characteristics
		ASTM D-1238	ASTM D1505/ D4883		
Cast Film	218B/BJ	2	0.918	Cling film, Stretch films for manual and pallet wrap, melt embossed films and other general purpose applications	Good thermal stability, optical property, puncture resistance, J-TNPP free
	222NJ	2.2	0.921	Hand and pallet stretch wrap film Wire & Cable Sheathing	Optimum thermal stability. Excellent transparency and good toughness properties.
	318B/BJ	2.8	0.918	Cling film, Stretch films for manual and pallet wrap, melt embossed films and other general purpose applications	Good thermal stability, optical property, puncture resistance, J-TNPP free
	6318BJ	2.8	0.918	Pellet wrap (pre- stretch), high performance draw down films and other general purpose applications where high strength is required	hexene comonomer, excellent optical properties, toughness, puncture resistance and tear strength
	319BJ	3.0	0.918	Stretch wrap film, produce bags, liners, Multilayer film for food & non-food packaging	Optimum thermal stability. Good puncture resistance, high tensile strength and elongation properties
	230BJ	3.1	0.922		Optimum thermal stability, Good flow characteristics for easy Processing Excellent transparency and toughness.
Wire & Cable	318CNJ	2.8	0.918	LV insulation, Telecom/ LV jacketing	Via Silane X-lining
	318CNJ	2.8	0.918	One-step or two-step silane cross-linkable low voltage cable	Good mechanical, electrical properties & good cross- linking performance
	324CNJ	3.6	0.924		
	128CNJ	1.0	0.928	LV and communication cable jacketing	--
Injection Molding	M200024	20	0.924	Closure, cap, lids, lamitude shoulder	High flow ability
	M500026	50	0.926		

LLDPE (Linear Low-Density Polyethylene) (Cont)

Process	Grade	MI, g/10 min @190oC, 2.16kg	Density, g/cm <sup>3</sup>	Typical Application	Characteristics
		ASTM D-1238	ASTM D1505/ D4883		
Roto Molding	R50035	5	0.935	General purpose rotomoulding primarily for middle and inner layers	Good process ability & mechanical properties, non-UV stabilized grade
	R50035E	5	0.935	Rotational molding of water tanks, industrial and agricultural tanks and containers	Good mechanical properties. Contains UV stabilizer
	R40039E	3.5	0.939	Rotational molding of large water tanks, large industrial and agricultural tanks and containers	Excellent mechanical properties, high rigidity, toughness, good impact strength, low warpage, excellent surface finish. UV-stabilized
Compound	RG50035	5	0.935	Masterbatch/ compounding	Powder for compounding with pigments, excellent for inner foam layer
	MG200024	20	0.924		Powder form, stabilized, high flowability
	MG500026	50	0.926		
	318B	2.8	0.918		Granule, silane compound

LDPE (Low-Density Polyethylene)

Process	Grade	MI, g/10 min @190oC, 2.16kg	Density, g/cm <sup>3</sup>	Typical Application	Characteristics
		ASTM D-1238 ISO 1133	ASTM D-1505 ISO 1183		
Blown Film	HP0321NN	0.25	0.921	Heavy-duty bags, industrial shrink films, construction and agricultural films.	Good combination of processability, stiffness and physical properties
	HP0322NN/ HP0323NN	0.3	0.922	Heavy-duty film, shrink film, agricultural film, Bags & pouches	Excellent puncture resistance & shrinkage Without slip & antiblock
	HP0722N	0.7	0.922	Med. Duty bags, Agri film, shopping bags, shrink film	No/med slip, no/low AB
	HP0724NN	0.75	0.924	Lamination films, Collation shrink, Shopping bags, Garbage bags. Food packaging, Agricultural films.	Excellent processability and draw down Good physical properties in blends with LLDPE
	HP0723JN	0.75	0.923		Grade contains Slip & Antiblock. Excellent processability and draw down Good physical properties in blends with LLDPE
	HP0823NN/ JN	0.8	0.923		No/med slip, no/med AB
	HP2022NN/ JN HP2023NN/ JN	2.0	0.922/0.923	Light produce bags, Textile bags, GP bags with good optical	No/med slip, no/med AB
	HP2025JN	2.0	0.925	Light-produce bags. Textile packaging. General purpose bags. Hygiene films. Food packaging films.	Grade contains Slip & Antiblock. High clarity resin designed for clarity over wraps applications Excellent processability and drawdown Superior optical properties and excellent tensile and tear strength
	HP2025NN	2.0	0.923	Foam. Bubble film. General purpose blown film.	Excellent performance in cast film, foam, blown film and bubble film extrusion Good toughness and impact properties

LDPE (Low-Density Polyethylene)

Process	Grade	MI, g/10 min @190oC, 2.16kg	Density, g/cm <sup>3</sup>	Typical Application	Characteristics
		ASTM D-1238 ISO 1133	ASTM D-1505 ISO 1183		
Blown Film	HP4025ZN	3.5	0.923	Light produce bags. Textile packaging. High clarity applications.	Grade contains Slip & Antiblock. Good mechanical properties and high optical properties. Good drawdown properties and excellent processability.
	HP4023WN	4.0	0.923	Laundry bags, high clarity produce bags,	Med slip, high AB
	HP4024WN/ JN	4.0	0.924	high clarity thin film application	Med slip, high AB/no slip, no AB
	HP2027NN	2.0	0.927	Thin shrink film, lamination film, pkg. film for food & Industrial goods, bags & pouches	No slip, no AB/med. Slip, low AB
	HP4027NN/ JN	4.0	0.927	Thin film for textile pkg., high clarity laundry bags, GP film, bread bags, high speed automatic pkg. lines	No slip, no AB/med. Slip, low AB
Injection Molding/ Masterbatch	HP20020	20	0.920	Materbatch & compounds, lids	Available in granules
	HP7022	7	0.922	Lids, caps & closure	Available in granules
Foam Applications	HP4023WN	4.0	0.923	LDPE foam	Med slip, med AB
	HP4024WN	4.0	0.923		Low slip, high AB
	HP2022NN/ HP2023NN	2.0	0.923		No slip, no AB
	HP2022JN/ HP2023JN	2.0	0.923		Med. Slip, low AB
	HP2027NN	2.0	0.927		Low slip, no AB/no slip, no AB
	HP4027NN	4.0	0.927		Med. Slip, low AB
	HP4024NN	4.0	0.923		No slip, no AB
Wire and Cable	HP2022NN/ HP2023NN	2.0	0.922	Low voltage insulation (via silane X-linking)	--

LDPE (Low-Density Polyethylene)

Process	Grade	MI, g/10 min @190oC, 2.16kg	Density, g/cm <sup>3</sup>	Typical Application	Characteristics
		ASTM D-1238 ISO 1133	ASTM D-1505 ISO 1183		
Foam Application	HP0722NDF	0.7	0.922	Packaging, Construction, Automotive, Footwear, Sports & Leisure	SABIC® LDPE HP0722NDF is a grade typically used in foam applications. It is without slip and anti-block additives. This grades is ideally suitable for foaming processes using both physical and chemical blowing agents
	HP0824NDF	0.8	0.924		SABIC® LDPE HP0824NDF is a grade typically used in foam applications. It is without slip and anti-block additives. This grades is ideally suitable for crosslink- and non-crosslink foaming processes using both physical and chemical blowing agents.
	HP2022NDF	2	0.922		SABIC® LDPE HP2022NDF is a grade typically used in foam applications. It is without slip and anti-block additives. This grades is ideally suitable for foaming processes using both physical and chemical blowing agents
	HP2024JDF	2	0.924		SABIC® LDPE HP2024JDF is a grade typically used in foam applications. It is with slip and anti-block additives. This grades is ideally suitable for crosslink- and non-crosslink foaming processes using both physical and chemical blowing agents
	HP2024NDF	2	0.924		SABIC® LDPE HP2024NDF is a grade typically used in foam applications. It is without slip and anti-block additives. This grades is ideally suitable for crosslink- and non-crosslink foaming processes using both physical and chemical blowing agents
Extrusion Coating	7019EC	7.0	919	Extrusion coating	Low neck-in, Good adhesion on Paper, Al-Foil & woven fabric

EVA

Process	Grade	MI, g/10 min	Vinyl content	Density, g/cm <sup>3</sup>	Typical Application	Characteristics
		ASTM D-1238 ISO 1133	ISO 8985	ASTM D-1505 ISO 1183		
Foam Application	2518DF	2.5	18%	0.94	Foam (foorwear, sports, and leisure), durable bags, and sealants	Used in foam applications Without slip and anti-block additives It is with thermal stabilizer Suitable for foaming process using both physical and chemical blowing agents

SUPEER (Metallocene Polyethylene)

Process	Grade	Melt Flow Rate, (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	<ul style="list-style-type: none"><li>• C8 comonomer, bimodal</li><li>• Excellent mechanical properties (dart impact, tear and puncture) and optical properties</li><li>• Excellent sealability and processability</li><li>• Superior organoleptic</li><li>• Grade name with suffix L contains slip &amp; antiblock agents</li></ul>
	8115(L)	1.1	0.915		
Cast Film	8315	3.0	0.915	Stretch wrap film, silage film	<ul style="list-style-type: none"><li>• C8 comonomer, bimodal</li><li>• Excellent processability and organoleptic (very low odor, smell, volatiles)</li><li>• Excellent mechanical and optical properties</li></ul>
	8318	3.0	0.918		

COHERE (Polyolefin Plastomer)

Process	Grade	Melt Flow Rate, (190°C, 2.16kg)	Density (g/cm³)	Typical Applications	Characteristics
Blown Film	8102(L)	1.0	0.902	Sealing layer of advanced flexible packaging (meat, cheese, dry foods – cookies, chips, cereal, liquid, stand-up pouch and etc.), perfect sealing solution for low	<ul style="list-style-type: none"><li>• C8 comonomer</li><li>• Exceptional heat sealing properties (lower heat seal initiation temperature, excellent hot tack and heat sealing strength)</li><li>• Very good optical properties and toughness</li><li>• Grade name with suffix L contains slip &amp; antiblock agents</li></ul>
	8170D	1	0.868		
Cast Film	8402	3.5	0.902	sealing temperature and high speed FFS packaging line and very strict requirement for packaging reliability and integrity	Heat-sealing properties, clarity, toughness, flexibility and elasticity. It has strict gel control to meet high quality film
	8570D	5	0.868	Sealant layer in multi-layer film; Cling layer in stretch wrap film; Adhesive layer in surface protect film.	
Blown Film	8170D	1	0.868		

SABIC® POLYOLS PORTFOLIO

Grade	Hydroxyl Number (mg KOH/g)*	Viscosity (mPa.s)	Typical Properties / Applications
POLYOL 0434	32.3 - 35.6	415 - 455	High reactivity, high resilience (HR) flexible molded foams, semi-flexible molded foam, NVH (noise, vibration, harshness) molding, formulating (systems) and specialty foams for interior trim and seating
POLYOL 0548	46 - 50	650 - 750	General purpose polyol, flexible slabstock foams ranging from low to high density
POLYOL 0656	54.5 – 58.5	550-650	
POLYOL 1127	27 - 29	1060 - 1200	High reactivity, high resilience flexible molded foams with TDI, TDV PMDI blends or MDI, semi-rigid integral skins and cold cure MDI foams
POLYOL 1132	30.5 – 34.5	1050-1250	High resilience flexible molded foams for seating and interior foam, high load bearing and dual hardness foams, a broad range of semi-flexible molded foam
POLYOL 1529	27.5 – 31.5	1400-1600	High resilience (HR) and combustion modified high resilience (CMHR) flexible slabstock
POLYOL 0842T1	39.5 – 45	900-1300	Styrene acrylonitrile-based (SAN) copolymer polyol with 15% solid content, high load-bearing flexible slabstock foams
POLYOL 0842T2	39.5 – 45	900-1300	
POLYOL 0844T1	42-46	800-1050	Styrene acrylonitrile - based (SAN) copolymer polyol with 10% solid content, high load - bearing flexible slabstock foams
POLYOL 0844T2	42-46	800-1050	
POLYOL 1339T1	35.5 – 40.5	1350-1750	Styrene acrylonitrile - based (SAN) copolymer polyol with 25% solid content, high load - bearing flexible slabstock foams
POLYOL 1339T2	35.5 – 40.5	1350-1750	

Please refer to safety data sheet (SDS) separately for information on EHS general guidelines and precautions during handling and storage of SABIC® POLYOLS on www.SABIC.com

SABIC® ISOCYANATES PORTFOLIO

Grade	Isocyanate (NCO) content (% weight)*	Viscosity (mPa.s)	Typical Applications
MDI 2031	30-32	160-240	Polymeric MDI. Foamed and non-foamed rigid, viscoelastic and flexible applications suitable for the production of foamed and non foamed rigid, viscoelastic and flexible applications
TDI 0380	48	3	Acidity of 40 ppm, well suited for use in automotive seating, furniture applications, mattress cushioning, specialty foams, coatings, adhesive, sealants and prepolymers

Please refer to safety data sheet (SDS) separately for information on EHS general guidelines and precautions during handling and storage of SABIC® POLYOLS on www.SABIC.com

SABIC® PG PORTFOLIO

Grade	Name	Applications
SABIC®PGI	Propylene Glycol Industrial Grade	SABIC®PG is intended for use as a raw material in the production of saturated and unsaturated polyester resins. It may also be employed as a mining chemical, cement-grinding additive, initiator in the synthesis of polyether polyols and other industrial applications
SABIC®PGT	Propylene Glycol Technical Grade	SABIC®PGT is intended for use as a raw material in the production of saturated and unsaturated polyester resins. It may also be employed as a mining chemical, cement-grinding additive, initiator in the synthesis of polyether polyols and other industrial applications
SABIC®DPG	Dipropylene Glycol Regular Grade	A solvent coupling agent and chemical intermediate used in: <ul style="list-style-type: none"><li>• For making dipropylene glycol dibenzoate for plasticizers, and in making dipropylene glycol diacrylate for radiation cured resin formulations.</li><li>• As a reactant in unsaturated polyester resins to add flexibility and hydrolytic stability to the finished resin.</li><li>• An initiator for urethane polyol synthesis using epoxides, and for the polyol in rigid polyurethane foams.</li><li>• In brake fluid formulations, cuttings oils, textile lubricants, printing inks, coatings, industrial soaps.</li></ul>
SABIC®TPG	Tripropylene Glycol Regular Grade	A versatile chemical intermediate and solvent used in: <ul style="list-style-type: none"><li>• Used in initiators for urethane polyol synthesis and as a component in some polyurethane foam systems.</li><li>• Its broad solvency makes it an excellent choice as a solvent. it is used in ink removal creams.</li><li>• Used in textile soaps and lubricants, cutting oil concentrates, and similar products.</li><li>• For personal care applications, the low toxicity, non-irritating nature, solvency and compatibilizing power of TPG, are important characteristics in applications such as stick deodorants.</li></ul>

Please refer to safety data sheet (SDS) separately for information on EHS general guidelines and precautions during handling and storage of SABIC® POLYOLS on [www.SABIC.com](http://www.SABIC.com)

SABIC® PO PORTFOLIO

Grade	Name	Applications
SABIC®PO	PROPYLENE OXIDE	SABIC® PO is a transparent and highly-reactive material, produced through epoxidation reaction with propylene.  SABIC® PO is a base material in the manufacture of Polyol (automobile, furniture appliance, and building insulating materials), Propylene Glycol (cosmetics, fibers), Propylene Glycol Ether (detergent), Isopropanol Amines, Fumigant, Synthetic Lubricants, Synthetic elastomer (homopolymer) and Solvents.

Please refer to safety data sheet (SDS) separately for information on EHS general guidelines and precautions during handling and storage of SABIC® POLYOLS on [www.SABIC.com](http://www.SABIC.com)

PP Homopolymer

Process	Grade	MI, g/10 min	Density, Kg/m <sup>3</sup>	Typical Application	Characteristics	
		ASTM D-1238 ISO 1133	ASTM D-1505 ISO 1183			
Raffia Extrusion	5051P	2.2	905	woven sacks, woven fabric, monofilament, box strap, rope & straw.	Excellent mechanical properties & low water carryover.	
	PP500P	3	905	Woven bag, FIBC, rope & twines, carpet backing, geotextiles & concrete reinforcement	Consistent process ability, good mechanical properties	
	5001P	3.0	905	woven sacks, woven fabric, monofilament, box strap, rope & straw.	Excellent mechanical properties & low water carryover	
	5061P	4.0	905			
	PP506P	4.8	905	Low denier tapes, woven bags, carpet backing & concrete reinforcement	Good high line speed process ability, good mechanical properties	
Fiber Extrusion	PP510P	12	905	Sewing thread , geotextiles, staple fiber	Good process ability, spin ability & gas fading resistance	
	PP518A	25	905	BCF, CF & SF for carpet pile & upholstery	Consistent process ability, thread line stability, good gas fading resistance	
	PP518P	25	905			
	PP5161A	3.5	905	Geotextiles	High Tenacity and Good Processability	
	PP512A	25	905	woven sacks lamination	Consistent process ability, thread line stability, color consistency & gas fading resistance	
	PP511A	25	905	Spunbond nonwoven fabric for diaper, filters & hygienic products	Consistent process ability, thread line stability, color consistency & gas fading resistance	
	PP519A	35	905			
Film Extrusion	IPP	PP520L	10	905	Garment & textiles bag, magazine covers, food packaging	Good optical properties & process ability
	BOPP	PP521P	3	905	Core layer in co-extruded BOPP film, plain BOPP film	Excellent optical properties, high tensile strength, metalizable
		PP5211P	3.3	905		
		PP524P	2	905		Excellent optical properties, very high tensile strength, metalizable
		P5241P	2.2	905	Food bags, Synthetic paper, heat sealable barrier packaging film	Films exhibit excellent optical, mechanical and moisture barrier properties, suitable for metallization.
	CPP	PP526P	8	905	Core layer in co-extruded CPP film, plain CPP film	High gloss & clarity, high melt strength, metalizable

PP Homopolymer

Process	Grade	MI, g/10 min	Density, Kg/m <sup>3</sup>	Typical Application	Characteristics
		ASTM D-1238 ISO 1133	ASTM D-1505 ISO 1183		
Thermoforming	PP522K	3	905	Cup, trays, lids & various containers	High stiffness, exceptional clarity, good dimensional stability
	PP528K	3	905	Cup, trays, lids & various containers	High stiffness, good clarity, good dimensional stability
	PP5271K	3	905	Suitable for the production of high transparency cups, trays, lids and various containers with high stiffness.	Very high stiffness, very good clarity, very high heat distortion temperature, very good dimensional stability, good processability and fast molding cycle.
Injection Molding	PP570P	8	905	Household articles	Consistent process ability, good gloss & dimensional stability
	PP5701P	6	905	Garden furniture & rigid parts	
	PP5702P	9	905		
	PP5703P	12	905	Household articles, caps & closures, containers, toys	High stiffness, good heat resistance and good flow characteristics
	PP575P	11	905		
	5705P	15	905	furniture, housewares, caps & closures, containers and toys.	
	PP5780P	25	905	Household articles, toys, thin wall packaging, caps & closures	Consistent process ability, good gloss & dimensional stability
	PP5707N	25	905	Housewares, thin wall packaging, caps & closures & garden furniture	Consistent process ability, fast molding cycle, good gloss & clarity, high stiffness
	PP579S	47	905	Housewares, thin wall packaging, Appliances, caps & closures	Low warpage, high lot to lot consistency, high stiffness, outstanding flowability & high gloss.
Compounding	PP591A	6	905	Automotive compounding applications where high rigidity and good thermal characteristics are required	Medium flowability, high stiffness & formulated with dedicated automotive additive package.
	PP595A	47	905		High flowability, high stiffness & formulated with a dedicated automotive additive package

PP Random Copolymer

Process	Grade	MFR, g/10min	Density Kg/m <sup>3</sup>	Typical Application	Characteristics
		ASTM D-1238			
Cast Film	PP621P	8.0	898	Lamination film	Good processability
	PP622L	8.0	898	Cast film	Good processability, low COF
Injection Molding	QR6701K	10	898	Clear housewares & packaging items, caps & closures & ISBM bottles	Consistent processability, good stiffness, exceptional clarity, lower energy consumption & less cycle time due to low processing temperatures
	QR6731K	25	898	Clear housewares items, caps & closures, food containers, ISBM bottles & CD boxes	
	QR6711K	45	898	Clear thin wall containers & boxes, housewares, caps & closures	Consistent processability, good stiffness, exceptional clarity, low warpage, high flowability, lower energy consumption & less cycle time due to low processing temperatures

PP Impact Copolymer

Process	Grade	MI, g/10min	Density, Kg/m <sup>3</sup>	Typical Application	Characteristics
		ASTM D-1238 ISO 1133	ASTM D-1505 ISO 1183		
	36MK10	5.5	905	containers, battery, furniture & general-purpose items.	Nucleated, balanced impact and stiffness.
Injection Molding	PP56M65	7.0	905	Battery cases, pails & containers, crates & boxes	Good heat aging resistance, high impact resistance & low warpage tendency
	37MK10	9	905	Crates, electrical appliances, thin wall applications and industrial applications	Nucleated, good impact, high stiffness and good heat stability.
	PP57MNK10	12	905	Garden furniture, housewares, pails & containers, crates & boxes	Medium flow properties, low warpage, high impact resistance
	PP48MK40	16	905	General purpose injection molding articles, pails & containers, housewares & garden furniture	Medium flow properties, good impact resistance & good stiffness
	PP57MNK40	12	905	Pails, containers, crates & boxes	Low dust attraction, high impact resistance, low warpage
	PP49MK45	21	905	Housewares, garden furniture, toys & thin walled containers	Medium flow properties, good impact resistance & high stiffness
	310MK10	24.5	905	Containers, battery, furniture & general-purpose items.	Balanced impact and stiffness.
	310MK40	24.5	905	crates, pails & appliance components.	It contains anti-static agent.. Balanced impact and stiffness
	312MK10	39	905	Crates, electrical appliances, thin wall and industrial products.	Balanced impact and stiffness.
	312MK40	39	905	crates, electrical appliances, thin wall and industrial products.	Antistatic , Balanced impact and stiffness.
	PP412MK49	45	905	Thin walled injection molded articles	High flow properties, good impact resistance & high stiffness
	PP413MNK45	70	905	Thin walled injection molded articles	Very high flow properties, good organoleptic, good impact resistance & excellent stiffness
	PP513MN40	70	905	Thin walled injection molded articles	Very high flow properties, excellent impact resistance & good stiffness

PPC (Polypropylene Compound)

Process	Grade	MI dg/min	Density (Kg/m <sup>3</sup> )	Typical Application	Characteristics
Injection Molding	15T1020	7	1040	Auto-Under the bonnet, HVAC, Non-auto: AC fan small appliances, furniture, Housings	20% talc filled Auto: Good thermal stabilization, high modulus,  Non auto: Good flow process ability, High stiffness Vs. unfilled PP, Good chemical resistance
	15T1030	6	1150	Auto Under the bonnet, HVAC,	30% talc filled Good thermal stabilization, high modulus,
	17T 1022	15	1040	Auto: Under the bonnet applications	22% talc filled Combined good performance with good processing
	1961	35	-	General applications	20 % talc filled Good mechanical performance with good processing
	19T 1020	18	1050	High flow injection molding applications	20% talc filled Heat stabilized
	19T1040	18	1250	Auto: Complex injection molded parts requiring a very high modulus and very high thermal stability Non-Auto: Appliance, Housing, furniture parts	40%Talc filled Auto: Very high stiffness and high flow Non-Auto: Good flow and Process ability, high stiffness vs. unfilled PP, High chemical resistance
	31T1010	11	970	General purpose applications	10% talc filled Based on PP copolymer
	3310 H	25	970	Auto: Under the bonnet applications	10% talc filled Heat stabilized, Good performance with good processing
	3320 EH	20	1040	Auto: High temperature and low emission applications	20% talc filled Higher stiffness and heat ageing performance
	3510H	12	970	Injection molding general	10% talc filled Copolymer based. Low density good flow and mechanical properties
	3720E	18	1040	Auto: Non-aesthetical automotive interior parts	20% talc filled Excellent stiffness impact ration Low emission and fogging behavior
	37T1020	13	1040	Auto: Automotive interior parts door panels and column claddings Non-Auto: Appliance parts, furniture parts	20%Talc filled Auto: Excellent impact and stiffness balance Non-Auto: Good flow and Process ability, higher impact vs. talc homopolymer PP

PPC (Polypropylene Compound) (Cont)

Process	Grade	MI dg/min	Density (Kg/m <sup>3</sup> )	Typical Application	Characteristics
Injection Molding	37T1030	13	1150	Auto: Automotive interior parts door panels and column claddings	30% talc filled Copolymer based composition High flow
	7705	22	1040	Auto: Aesthetical automotive interior parts such as instrument panels, door trims, lower and upper dashboard	Talc filled High Scratch resistance, High stiffness, good impact Broad processing window
	7706	22	1000	Auto: Aesthetical automotive interior parts such as instrument panels, door trims, lower and upper dashboard	Talc filled High Scratch resistance, High stiffness, good impact Broad processing window
	8500	9	1000	Auto: Zero gap automotive bumpers Painted exterior auto applications	15% talc filled Low density, Excellent impact stiffness balance
	8900P	20	1080	Auto: Suitable for high demanding applications	Talc Filled: 25% High flow, very high stiffness and impact, Low CLTE, UV stabilized
	8950	15	1135	Auto: Painted automotive exterior applications	Talc filled: 30% Good dimensional stability , very high stiffness
	9152	14	1000	Auto: automotive interior parts such as instrument panels, door trims, lower and upper dashboard	Talc Filled:15% High Scratch resistance , high stiffness, good impact
	9156	25	1020	Auto: Aesthetical automotive interior parts such as instrument panels, door trims, lower and upper dashboard (Ford Interior requirements)	Talc filled: 15% High Scratch resistance , high stiffness, good impact
	G3240A	5	1220	Auto: Under the hood and structural parts  Non-auto: Structural parts with high strength requirement	40% glass filled Auto: chemical coupled glass fibers. Non auto: Higher stiffness , heat resistance, lower cost and density compared to filled PA, superior chemical resistance vs. ABS
	G3135X	1.2	1170	Auto: air intake manifolds	35% short Glass filled High stiffness, High impact, High stiffness, High heat resistance Chemically coupled glass fibers

PPC (Polypropylene Compound) (Cont)

Process	Grade	MI dg/min	Density (Kg/m³)	Typical Application	Characteristics
Injection Molding	G3220A	17	1040	Auto: Under the hood and structural parts  Non-auto: Structural parts with easy processing requirement	20% glass filled Auto: chemical coupled glass fibers .  Non auto: Higher stiffness , heat resistance, lower cost and density compared to filled PA, superior chemical resistance vs. ABS
	G32320AE	12	1120	Auto: Under the hood and structural applications  Non-auto: Structural parts with low emission requirement	30% glass filled Auto: Optimized for low emission values.  Non auto: Higher stiffness , heat resistance, lower cost and density compared to filled PA, superior chemical resistance vs. ABS
	G3230A	11	1130	Auto: Under the hood and structural applications  Non-auto: Structural parts with low emission requirement	30% glass filled Auto: Low emission values, chemical coupled glass fibers . Combined good performance profile with fast processing.  Non auto: Higher stiffness , heat resistance, lower cost and density compared to filled PA, superior chemical resistance vs. ABS
	G3230AE	12	1120	Auto: Under the hood structural applications Non-auto: Structural parts with low emission requirements	30% glass filled Auto: Low emission values, chemical coupled glass fibers  Non auto: Higher stiffness , heat resistance, lower cost and density compared to filled PA, superior chemical resistance vs. ABS
	G3230X	12	1120	Auto: Under-the hood and structural applications	30% short glass filled Ultra high heat resistance, chemically coupled glass fibers

FORTIFY (Polyolefin Elastomer)

Process	Grade	Melt Flow Rate, (190°C, 2.16kg)	Density (g/cm³)	Typical Applications	Characteristics
Compounding Foaming, Extrusion	C0560 (D)	0.5	0.863	Impact modification for automotive components (Car bumpers, Auto interiors, Dashboard, Instrument panel, and Door trims) • Footwear • Wire & cable • Grafting POE for Polyamide modification	• 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
	C1055D	1	0.857		
	C1060 (D)	1	0.863		
	C1070 (D)	1	0.868		
	C1080	1	0.880		
	C1085	1	0.885		
	C3070 (D)	3	0.868		
	C3080	3	0.880		
	C5070 (D)	5	0.868		
	C13060D	13	0.863		
	C30070 (D)	30	0.868		

PET (Polyethylene Terephthalate)

Process	Grade	IV (dl/g)	Typical Applications	Characteristics
Extrusion	HC200	0.84 ± 0.02	Woven tape fabric from which sacks, geotextiles, carpet backing, composites and other products can be made	High I.V. and good mechanical properties
Injection Molding	BC211	0.76 ± 0.02	Bottles for water. Noncarbonated bottles & other packaging applications	Low I.V. and low acetaldehyde generation on melting
	BC210	0.80 ± 0.02	Bottles for carbonated drinks. General packaging applications	Medium I.V.
Injection Molding/ Sheet Extrusion	BC212	0.84 ± 0.02	Bottles for carbonated drinks; Noncarbonated bottles & other packaging applications	High I.V. and low acetaldehyde. Good mechanical properties; high burst strength & extra mechanical strength required in hot countries
Injection Molding	PCG PET 60	0.60 ± 0.02	Vacuum Blood Tubes, Petri dishes.	Medium IV, better mechanical strength, thin wall injection molding application Pharmacopoeia approved
	PCG PET 80	0.80 ± 0.02	Pharma bottles for syrup and tablet packaging	Medium IV. Pharmacopeia approved
	PCG PET 84	0.84 ± 0.02	Pharma bottles for syrup and tablet packaging	High IV. Better mechanical strength, Pharmacopeia approved

PVC (Polyvinyl Chloride)

Process	Grade	K-Value	Typical Applications	Characteristics
Extrusion	67S	67	Pressure and non-pressure pipe profiles Corrugated tubes and conduits	<ul style="list-style-type: none"><li>• Very low dust-level</li><li>• High purity</li><li>• High bulk density</li><li>• Narrow particle size distribution</li></ul>
Extrusion/ Injection Molding & Calendaring	57S	59	Pipe fittings Rigid sheets and film	<ul style="list-style-type: none"><li>• Low content of fines</li><li>• High tensile properties</li><li>• Narrow particle size distribution</li></ul>
	70S	70	<ul style="list-style-type: none"><li>• Cable sheathing and wire insulation</li><li>• Flexible film and sheets</li><li>• Flexible profiles &amp; Hoses</li><li>• Flexible articles like shoe soles</li></ul>	<ul style="list-style-type: none"><li>• Excellent plasticizer absorption</li><li>• High purity</li><li>• Low content of fines</li><li>• Good electrical properties</li></ul>

General Purpose Polystyrene (GPPS)

Process	Grade	MI	Density (Kg/m³)	Typical Application	Characteristics
Injection Molding	PS100	14	1050	Medium & thin wall thickness articles for Disposable items, office stationery, jewelry boxes	Crystal-like, hard and brittle polymer good flow properties & high clarity.
	PS125	9.0	1050	Disposable clear injection molding articles for mid and thick wall applications	Crystal-like, hard and brittle polymer medium flow and high clarity. medium vicat and heat deflection temperatures.
Extrusion	PS155	7	1050	Insulation boards	Medium flow good tensile and flexural strength. high vicat and heat deflection temperatures.
	PS160	3.3	1050	Insulation boards and food packaging	Crystal-like, hard and brittle material. High molecular weight & high tensile strength; high vicat and heat deflection temperatures.

High Impact Polystyrene (HIPS)

Process	Grade	MI	Density (Kg/m³)	Typical Application	Characteristics
Injection Molding	PS325	8	1040	Appliance parts, toys, furniture parts, containers, structural foam applications.	Medium flow characteristics high tensile and flexural strength medium heat deflection and vicat temperatures.
Extrusion	PS330	4	1040	Food packaging and dairy products.	High impact strength high heat deflection temperature good physical properties.

Expanded Polystyrene (EPS)

Process	Grade	Bead Diameter (mm)	Density Range g/cm³	Typical Application
Pre-expansion- Shape Molding / Block molding	EPS 452	0.4 – 0.8	18 – 35	Fast cycle molding of articles having wall thickness less than 10 mm.
	EPS 552	0.6 – 1.1	17 – 30	Fast cycle shape molding e.g., boxes and industrial packaging.
	EPS 652	0.9 – 1.4	16 – 25	Fast cycle, thick wall shape molding, medium/low density molding.
	EPS 763	1.2 – 2.5	15 – 20	Fast cycle low density block molding.
	EPS 450FF	0.4 – 0.8	18 – 35	Flame retardant grade for Molding thin-walled (5 – 10 mm) articles.
	EPS 550FF	0.6 – 1.1	16 – 30	Flame retardant grade for Standard block molding.
	EPS 650FF	0.9 – 1.4	15 – 25	Flame retardant grade for Medium and low density block molding. Thick wall contour shape molding.
	EPS 760FF	1.2 – 2.5	15 – 20	Flame retardant grade Fast cycle low density block molding.

EPDM (Ethylene Propylene Diene Monomer)

Process	SABICEPDM	MV	ENB%	C2%	Applications	Characteristics
Extrusion	756	72	5.0	69	Auto coolant / air hose, building profiles, industrial hoses, weather seals, TPV, wire & cable	Exhibits smooth and fast extrusion with tensile strength, compression set, and flexibility.
Extrusion/ Molding	855	80	5.2	55	Automotive weatherseals, auto coolant / air hoses, industrial gaskets and O rings for pipes / hoses, and washing machine gasket	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	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	Fast cure rate and high cure state with good low temperature flexibility and compression set properties.
Calendaring	626	67	2.8	69	Sheets, water management liners, and roof membranes	Good calenderability, mixing, tensile strength, compression set, and flexibility.

BR (Polybutadiene Rubber)

Process	SABIC BR	MV	Cis 1,4	Applications	Characteristics
Extrusion, Molding, and Calendering	4010	40+/- 5	96 Min	<ul style="list-style-type: none"><li>• Tire tread, sidewall and carcass</li><li>• Conveyor belt coverings</li><li>• Shoe sole, hoses and tube covers</li><li>• Mechanical and sporting goods</li></ul>	Low Mooney grade generally used in blends with other elastomers and is designed for <ul style="list-style-type: none"><li>• Good abrasion resistance</li><li>• Excellent flex cracking resilience</li><li>• Good low temperature properties</li><li>• Low cold flow property</li><li>• Excellent filler dispersion and shorter mixing cycles</li><li>• Low die-swell and good dimensional control</li></ul>
Extrusion, Molding and Calendering	4610	46 +/- 5	96 Min	<ul style="list-style-type: none"><li>• Tire tread, sidewall and carcass</li><li>• Conveyor belt coverings</li><li>• Shoe sole, hoses and tube covers</li><li>• Mechanical and sporting goods</li></ul>	Medium Mooney grade generally used in blend with other elastomers and is designed for <ul style="list-style-type: none"><li>• Excellent abrasion resistance</li><li>• Excellent flex cracking resistance</li><li>• Excellent resilience</li><li>• Good low temperature properties</li><li>• Low rolling resistance</li></ul>
Extrusion, Molding and Calendering	5510	55 +/- 5	96 Min	<ul style="list-style-type: none"><li>• Tire tread, sidewall and carcass</li><li>• Conveyor belt coverings</li><li>• Shoe sole, hoses and tube covers</li><li>• Mechanical and sporting goods</li></ul>	High Mooney grade generally used in blend with other elastomers and is designed for <ul style="list-style-type: none"><li>• Excellent abrasion resistance</li><li>• Excellent flex cracking resistance</li><li>• Excellent resilience</li><li>• Good low temperature properties</li><li>• Low rolling resistance</li></ul>

Carbon Black

Process	Grade	Iodine Adsorption No. (g <sub>1</sub> /Kg)	Oil Absorption No. (cm <sup>3</sup> /100g)	Tint Strength (%)	Typical Application	Characteristics
Mixing, extrusion & molding	N220	121	114	116	Truck and Passenger Car tyre treads. Pre-cured treads. Conveyor belts	Exhibits good wear/tear, stress/strain and processing characteristics.
Mixing, calendaring & molding	N326	82	72	111	Tire steel belt skim Molded goods OTR tread and sidewall	Exhibits good resistance to cut and tear, stress/strain and processing behavior
Mixing, extrusion & molding	N330	82	102	104	Tire treads, sidewall, filler & curing bladders Belts and hoses Mechanical goods, Gaskets and O-rings Footwear and sheeting	Exhibits good wear and tear, stress/strain and processing characteristics
	N339	90	120	111	Tire treads, sidewall, filler & curing bladders Conveyor belts. Solid tires Motor mounts	Exhibits good wear and tear, stress/strain and processing characteristics
	N375	90	114	114	Tire treads & sidewalls Conveyor belts. Solid tires. Motor mounts	Exhibits good wear and tear, stress/strain and processing characteristics

POLYCARBONATE (PC)

Process	SABIC® PC	Melt Flow Rate (g/10min), 300°C /1.2 kg	Melt Volume Rate (g/10min), 300°C /1.2 kg	Typical Applications	Characteristics
Injection Molding	PC5800	8.9 (@ 250 °C/ 1.2 kg)	8 (@ 250 °C/ 1.2 kg)	Optical Media (CD, DVD, BD)	Available in high flow, specifically designed for use in Optical Media
	PC2200R, PC2203R, PC1800R, PC1803R, PC1000R, PC1003R	22 18 10	21 17 9.5	General Purpose molding (Electrical, & Electronics, Electrical switches, Connectors, sockets, relays, Consumer electronics)	Available in range of melt flow, for general purpose injection molding applications
	PC1804R, PC1004R	18 10	17 9.5	Food Contact (Juicers, mixers, chocolate molds, water bottles)	Available in two melt flow range, for injection applications, with FDA Certification
	ALS02, ALS01	23 13	21 12	Automotive (Headlamp Lens)	Available in two melt flow range for injection molding applications
	PC2800, PC2200, PC1800, PC1500, PC1000, PC800, PC700	28 22 18 15 10 8 7	26 21 17 14 9.5 7.5 6.5	Compounding (Feedstock for blends/ alloys, Color compound, Specialty compounds, Master batches)	Available in variety of grades suitable for use as feedstock for custom compounding operations
Extrusion	PC0703, PC0703R	7	6.5	Extrusion (Sheets, Films, Displays, Glazing)	Available for extrusion based applications with UV stabilization and standard and higher Release

LEXAN™ Resin (Polycarbonate)

Process	Grade	MVR (cm³/10min) 300 °C /1.2 kg	Density (g/cm³)	Typical Application	Characteristics
Injection Molding	123R	21	1.2	Control Panels, Monitoring Device Housings, Dialysis Management Systems, Disposable Devices, Cell Phones cases, LED's ,Meter Housings, Diffusers, Traffic Lights, Spotlights, Reflectors Lamp Holders, Emergency Lights, Motor End-caps, Diffusers, Brush Holders,	General Purpose Grades. UV Stable With Internal Mold Release.
	143R	12			
	163R	9			
	223R	21			
	121R	21	1.2	Disposable Devices, Cell Phones cases, LED's ,Meter Housings, Diffusers, Traffic Lights, Spotlights, Reflectors Lamp Holders, Emergency Lights, Motor End-caps, Diffusers, Brush Holders,	General Purpose Grades. Includes Internal Mold Release.
	141R	12			
	161R	9			
	243R	12	1.2	Power Supply, Distribution Cabinets, Base Stations, Switches, Sockets, Relays, Plugs, Connectors, Smart Meters, Fuse Box, Switchgear, Motors Electrical Supply,	General Purpose Medium Flow Grade. UV Stable With Internal Mold Release, And UL-94 V2 Rating.
	500R	8	1.25		10% Glass-filled PC. Providing Higher Modulus, Mold Release And Flame Retardant With UL-94 V0 Rating.
	503R				
	505R				
	505RU				
	943	9	1.2		General Purpose Low Flow Grade. UV Stable And Halogen Free Flame Retardant With UL-94 V0 Rating.
	945U	10			
	3412R	6	1.35		20% Glass-filled PC, Providing Higher Modulus, Mold Release And Flame Retardant With UL-94 V0 Rating.

SABIC CYCOLAC - ABS

Process	Grade CYCOLAC -ABS	Melt Flow Rate, 220°C, 10kg	Density (g/cm³)	Typical Applications	Characteristics
		ISO 1133	ISO 1183		
Molding	MG47	18	1.04	Automotive cladding and Appliances applications - FDA approved	Multi-purpose, injection molding ABS providing a favorable balance of engineering properties
	MG94	42	1.04	AC housing, toys, Automotive and Sports goods applications - FDA approved	Superior flow, injection molding ABS. Good impact. For thin-wall applications.
Extrusion	EX58	4	1.03	RV interiors, marine Components, truck interiors, outdoor vehicles, luggage cases, co-extrusion, appliances, building and construction, spa and tub surrounds, blow Molding - FDA approved	High impact, Good process ability, Low Water Absorption

SABIC CYCOLACT™ Resin - SAN

Process	Grade	MVR (g/10min) 230°C /3.8 kg	Density (g/cm³)	Typical Application	Characteristics
Injection Molding	INP572	5.80	1.08	Air line Food Trays and Dishes and Lighters casings	Low flow SAN pellets. FDA compliant (part use must be at room temperature or below).
	INP576	23	1.08	Air line Food Trays and Dishes, Pen bodies, Rulers, Fan blades and Tooth brush handles	Medium flow SAN pellets. FDA compliant (part use must be at room temperature or below).

CYCOLOY™ Resin (PC/ABS)

Process	Grade	MVR (cm³/10min) 260°C/2.16 kg & 5kg*	Density (g/cm3)	Typical Application	Characteristics
Injection Molding	C1100HF	6 & 20*	1.12	Keyboards, Printers, and AC Housing. Toys, Automotive Sports Goods, Diabetes Management Systems, Insulin Pens, Hearing Aides.	CYCOLOY™ C1100HF Has Been Developed To Better Fill Long And Complex Parts While Maintaining Excellent Mechanical Properties.
	C1200HF	8 & 22*	1.15		CYCOLOY™ C1200HF Has Been Developed To Provide Higher Heat Resistance Option Compared To CYCOLOY C1100HF
	C2100HF	18*	1.2	Electrical Switches, Connectors, Sockets, Relays, Consumer Electronics Housings, Monitoring Device Electrical Enclosures, Thin Housing Phones/Mobile Devices	CYCOLOY™ C2100HF Is A Flame Retardant Blend With Improved Flow, Specially Developed To Meet The Stringent Requirements Applications.
	C2950 C2950HF C2800	12 22 16	1.17		CYCOLOY™ C2950 Is A Standard High Heat Grade With Halogen-free Flame Retardant.

PMMA (Polymethyl Methacrylate)

Process	SABIC PMMA	Melt Index (g/min)	Density (g/cm³)	Typical Applications	Characteristics
Extrusion, Molding, Thermoforming	P 15OE	1.5±0.5	1.19	Optical extrusion grade for sheets for signage, display, sound barrier, and LED light guide panels, as well as for profiles pipes and rods.	An optical extrusion grade characterized by low foreign matter counts and excellent transparency.
	17 OP	1.7±0.4	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 counts and optimum UV performance.
	20 HR	2±0.3	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
	P20MMH	2±0.7	1.19	General purpose grade suitable for injection molded housewares, automotive tail lights, optical lens, as well as for extrusion sheets, pipes, and rods.	Heat resistance grade characterized by high temperature of deflection under load (≥100 °C) and high Vicat softening temp (≥107 °C). Excellent process ability and weather.
	23 SP	2.3±0.5	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 molding with chemical resistance.
Molding	60MS	6±1.5	1.19	Household / Tablewares, Decorative Parts, Cosmetics Packaging, Automotive.	Special medium flow PMMA grade with balanced melt strength & viscosity for good processability and weather resistance.
	140 HF	14±2	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

POM (Polyoxymethylene Copolymer)

Process	SABIC POM	Melt Index (g/10min)	Density (g/cm³)	Typical Applications	Characteristics
Extrusion, Molding	30RE	2.8 + 0.5	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
	30S	3 ± 0.5	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
Molding	90S	9 ± 1	1.41	Wide range of plumbing products, camera gears and toys	General purpose standard injection molding grade. High rigidity, tough and hardness
	140S	14 ± 1.5	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 ± 3	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 ± 4	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 also shorter cycle times

POLYAMIDE 6

Process	Grade	Relative Viscosity	Water Content	Typical Applications	Characteristics
		ISO 307	%, w/w, ASTM D6869		
Extrusion	S27	2.7	≤0.6	Compounding, High tenacity filaments, velcro tapes & artificial grass	Medium viscosity. Contains no lubrication
	S32	3.2	≤0.6	Barrier film, high tenacity filament for fishing nets/ tire ,cord, compounding	High viscosity. Contains no lubrication

Data in table are typical values should not be construed as specification limits.

**Notice:** All information supplied by or on behalf of the SABIC in relation to its products, whether in the nature of data, recommendations or otherwise, is supported by research and believed reliable, but the relevant SABIC companies assumes no liability whatsoever in respect of application, processing or use made of the afore-mentioned information or products, or any consequence thereof. The user undertakes all liability in respect of the application, processing or use of the afore-mentioned information or products, whose quality and other properties he shall verify, or any consequence thereof. No liability whatsoever shall attach to any of the SABIC companies for any infringement of the rights owned or controlled by a third party in intellectual, industrial or other property by reason of the application, processing or use of the afore-mentioned information or products by the user.

---

## CONTACT US

### Riyadh, Saudi Arabia

**SABIC Corporate Headquarters**

PO Box 5101

Riyadh 11422

Saudi Arabia

T +966 (0) 11 225 8000

F +966 (0) 11 2259000

E [info@sabic.com](mailto:info@sabic.com)

### Europe

**SABIC Europe (For mail only)**

PO Box 5151

6130 PD Sittard

The Netherlands

T +32 (46) 722 2222

F +32 (46) 722 0000

E [info@sabic-europe.com](mailto:info@sabic-europe.com)

### Asia Pacific

**SABIC Asia Pacific**

9 Raffles Place

55-01 Republic Plaza

Singapore 048619

T +65 657 2555

F +65 657 2557

E [info@sabic.com.sg](mailto:info@sabic.com.sg)

### United States

**SABIC Americas**

Suite 650

2500 City West Boulevard

Houston, TX 77042

USA

T +1 713 532 4999

F +1 713 532 4994

E [info@sabicamericas.com](mailto:info@sabicamericas.com)