

Group	Grade	Characteristic	Application
High Impact Strength	ABS-40	High Impact resistance	Home appliances, Helmet, Automobile parts, Shoe heel
High flow	ABS-80	Medium impact resistance, High Flow	Office equipment, home appliances, Automobile parts
General	ABS-50	Medium impact resistance, Medium Flow	
	ABS-70	General purpose	Automobile parts, injection molded parts, profiles extrusion
	ABS GP 45-SW	Super white, common grade	Home appliances, Office equipment, Automobile parts

TYPICAL ABS PROCESSING CONDITIONS

DRYING: it is recommended that GBPC ABS Resins be dried at (80-85°C) for 3 hours.

The following molding conditions are recommended starting points for GBPC ABS Resin. A moisture level of ≤0.1% should be reached before injection molding the resin.

Some modifications may be required depending on the specific molding equipment and part configuration.

INJECTION MOLDING

Melt Temp (°C)	Nozzle Temp (°C)	Front Temp (°C)	Center Temp (°C)	Center Temp (°C)	Rear Temp(°C)
230	215-225	210-220	210-220	200-210	190-200
				Filling Speed	Mold Temp (°c)
				Slow-Med	60-80



Property	Test Method (ASTM)	Test Condition	Unit	ABS				
				General Purpose			High Impact Strength	High flow
				ABS-50	ABS-70	ABS GP 45 - SW	ABS-40	ABS-80
Izod Impact	D - 256	6.4 mm, Notched	KJ/m ²	20	25	23	28	18
Melt Flow Index	D - 1238	220°C, 10 Kg	gr/10 min	33	17	29	22	49
Rockwell Hardness	D - 785	R - scale	Rockwell	108	110	108	98	110
Heat Deflection Temp	D - 648	0.45 MPa	°C	88	88	88	84	87
Vicat Softening Temp	D - 1525	10 N	°C	95	100	100	92	95
Tensile Strength	D - 638	23°C, 50 mm/min	Kg/cm ²	430	420	420	350	440
Tensile Elongation	D - 638	23°C, 50 mm/min	%	14	15	17	20	15
Flexural Strength	D - 790	23°C, 2.8 mm/min	Kg/cm ²	620	620	600	450	640
Flexural Modulus	D - 790	23°C, 2.8 mm/min	Kg/cm ²	19500	19500	19500	16000	20000
Specific Gravity	D - 792	23°C	g/cm ³	1.04	1.04	1.04	1.04	1.04
Mold Shrinkage	D - 955	-	%	0.4 - 0.7	0.4 - 0.7	0.4 - 0.7	0.4 - 0.7	0.4 - 0.7
Flammability	UL 94	1/8 inch (3.2 mm)	-	HB	HB	HB	HB	HB

Note 1) These are typical property values, not specifications.

Note 2) In pre-colored products, the values could slightly differ from table values.

Note 3) Values are measured at 23°C and in relative humidity (RH) of 50% on injection molded specimens of natural grade compliant with ASTM standards