

Group	Grade	Characteristic	Application
Anti-static	50 V	Anti-static, medium impact strength	Electronic and electrical equipment, vacuum cleaner, home appliance
Flame retardant	HFA-70	Flame retardant, medium impact strength	Electronic and electrical equipment, automobile parts, home appliances, water heater
	HFA-75	Flame retardant, good sheet formability	Electronic and electrical equipment, automobile parts, home appliance
	HFA-78	Flame retardant, high flow	Electronic and electrical equipment, automobile parts, home appliance

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 $\leq 0.1\%$ 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)
220	210-220	200-210	200-210	200-210	190-200
			Filling Speed	Mold Temp (°c)	
			Slow-Med	60-80	



Property	Test Method (ASTM)	Test Condition	Unit	ABS(special grade)			
				Flame Retardant			Anti-static
				HFA - 70	HFA - 75	HFA - 78	50 V
Izod Impact	D - 256	6.4 mm, Notched	KJ/m ²	15	16	18	20
Melt Flow Index	D - 1238	220°C , 10 Kg	gr/10 min	32	12	50	32
Rockwell Hardness	D - 785	R-scale	Rockwell	112	110	110	109
Heat Deflection Temp	D - 648	0.45 Mpa	°C	84	84	82	88
Vicat Softening Temp	D - 1525	10 N	°C	94	92	92	95
Tensile Strength	D - 638	23°C, 50 mm/min	Kg/cm ²	420	470	400	430
Tensile Elongation	D - 638	23°C, 50 mm/min	%	15	12	15	15
Flexural Strength	D - 790	23°C, 2.8 mm/min	Kg/cm ²	620	620	600	620
Flexural Modulus	D - 790	23°C, 2.8 mm/min	Kg/cm ²	18000	20000	17500	19000
Specific Gravity	D - 792	23°C	g/cm ³	1.16	1.16	1.16	1.04
Mold Shrinkage	D - 955	-	%	0.4 - 0.7	0.4 - 0.7	0.4 - 0.7	0.4 - 0.7
Flammability	UL 94	½ inch (3.2 mm)	-	V-0	V-0	V-0	HB

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

Note 2) In case of 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.