



# BRAND OVERVIEW

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# HYBRID

4/11/2023

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PC-ABS and PC-PBT bring together the best properties and characteristics of polycarbonate combined with ABS and PBT to provide a balance of optimized properties. The final properties are a function of the overall PC, ABS and/or PBT content within the formulation. Ravago Manufacturing Americas has developed a portfolio of products that cover various blend ratios and properties.

HYBRID PC Alloys are used in multiple applications across the automotive, consumer, and industrial markets.

## COMMON EXAMPLES INCLUDE:

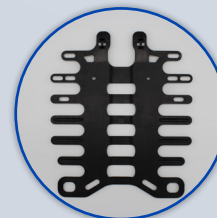
### PC-ABS ALLOYS ARE USED TO MAKE:



Glove  
Boxes



Overhead &  
Middle Consoles



Molded  
Seatbacks

### PC-ABS IS ALSO FOUND IN MANY POPULAR CONSUMER ELECTRONICS, INCLUDING:



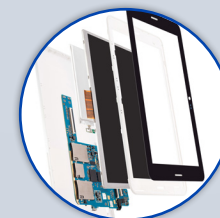
TV  
Frames



Laptop  
Monitor Enclosures



Phone  
Exteriors



Parts of Portable  
Hand-Held Devices

Grade	Type	Density (g/cc)	MFI (g/10min)	Notched Izod (kJ/m <sup>2</sup> )	UL Rating	Comments
		ISO 1183	ASTM D1238	ISO 180 (23C)	UL94	
S459	PC/ABS	1.11	20 (260°C/5.0 kg)	40	HB	High Temperature, Painting Grade; High Flow
S459HTP	PC/ABS	1.11	20 (260°C/5.0 kg)	40	HB	Improved HDT; Painting & Plating
S464	PC/ABS	1.12	15 (260°C/3.8 kg)	45	HB	General Purpose; High Flow, Improved Toughness & HDT
S464LG	PC/ABS	1.12	15 (260°C/3.8 kg)	40	HB	Low Gloss
S466	PC/ABS	1.14	20 (260°C/3.8 kg)	50	HB	High Flow; Max Toughness; Excellent Low Temperature Performance
S493	PC/ABS	1.06	13 (220°C/10.0 kg)	17	N/A	General Purpose
S470H	PC/ABS	1.21	8.5 (260°C/2.16 kg)	45	V0	Halogen Flame Retardant
S551/555	PC/ABS	1.18	21 (260°C/2.16 kg)	42	V0/5VA	Non-Halogen, High Flow
S570	PC/ABS	1.19	11 (260°C/2.16 kg)	46	V0/5VA	Extrusion/Injection, Non-Halogen
B2025I (U)	PC/PBT	1.18	20 (260°C/3.8 kg)	50	N/A	Low Temperature Impact
B2035I (U)	PC/PBT	1.19	34 (260°C/3.8 kg)	45	N/A	High Flow, Impact Resistant
B2026I (U)	PC/PBT	1.19	25 (260°C/3.8 kg)	54	N/A	Impact Resistant, Low Surface Haze
B3030 (U)	PC/PBT	1.21	35 (260°C/5.0 kg)	50	N/A	General Purpose (Not for Low Temperature Applications)
B6720 (U)	PC/PBT	1.24	20 (260°C/3.8 kg)	50	N/A	General Purpose, Superior Chemical Resistance

U denotes that this product is available in a UV stabilized version

Custom grades available with glass loading (5%-30%)

Automotive approvals available for some products

## PROCESSING CONDITIONS

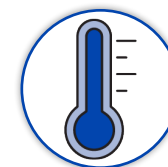
		S SERIES	B SERIES
Melt	°F	510-540	460-500
Nozzle	°F	520-540	460-500
Front	°F	510-530	460-500
Middle	°F	490-520	460-500
Rear	°F	480-510	450-470
Mold Temperature	°F	110-150	130-160
Drying Protocol	-	2-4 hours, 180F	2-4 hours, 200F
Injection Pressure	PSI	700-1500	
Injection Speed	"/s	>1 inch/second	
Holding Pressure	PSI	400-800	
Back Pressure	PSI	25-120	
Screw Speed	RPM	40-80	
Cushion	Inches	0.125	

## KEY CHARACTERISTICS

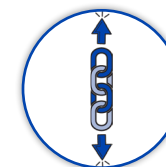
### PC IN THE FORMULATION OFFERS:



High  
Impact



Temperature  
Resistance



High  
Strength

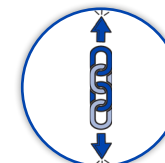
### ABS IN THE FORMULATION OFFERS:



Easy  
Processing



Low  
Density



High  
Strength



Cost  
Effective

### PBT IN THE FORMULATION OFFERS:



Chemical  
Resistance



Scratch  
Resistance



High Temperature  
Resistance