

# Product Selection Guide

## High Impact



### Polystyrene Product Selection Guide

#### High Impact Polystyrene Grades

	Product	Melt Flow Rate (g/10 min)	Vicat Softening Temp. (°F)	Notched Izod (ft-lb/inch)	Specular Gloss (60°) (%)	Key Attributes	Recommended Applications
High Impact Resins	5300	2.6	214	2.2	15	Excellent ESCR and good toughness; Low gloss; <b>No zinc stearate</b>	Food Packaging; Indoor signs; Retail displays; Printed materials
	5310	2.4	217	2.1	15	Excellent ESCR and good toughness; Low gloss	Food Packaging; Indoor signs; Retail displays; Printed materials
	5400/ 5401	3.0	212	2.6	25	Good balance of ESCR and toughness; Trims cleanly; Low gloss	Cosmetic, foodservice, retail and medical packaging
	5410	3.0	210	2.8	15	Good printability; Good ESCR; Low gloss	Retail & other signs; Medical and cosmetic packaging
	5600/ 5601	8.0	208	2.8	45	Great balance of toughness and rigidity in injection molded parts	Electronics housings; Housewares; Appliance parts
	5801	14.5	199	3.0	55	Excellent processibility; High toughness	Thin wall, multi-cavity molding applications; Masterbatches
	6210/ 6211	2.9	214	2.8	60	Great balance of toughness and rigidity	Single use foodservice; Profile extrusion; Portion containers
	6220	3.3	210	3.8	90	Excellent toughness; Designed for deep draw thermoforming; high gloss	Deep draw drink cups and containers; Signs; Packaging
	6230/ 6231	3.5	208	3.8	90	Excellent toughness; Designed for deep draw thermoforming; high gloss	Deep draw drink cups and containers; Signs; Packaging
	Refrigeration Impact Resins	7120	2.3	217	2.1	10	Great low temperature impact; ESCR to food
7800		3.6	214	1.5	95	Superior gloss; Good processibility	Co-extruded high gloss cap layer for durable goods

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# Product Selection Guide

## General Purpose Crystal



### Polystyrene Product Selection Guide

#### Crystal Polystyrene Grades

	Product	Melt Flow Rate (g/10 min)	Vicat Softening Temp. (°F)	Tensile Strength, Yield (psi)	Available with external lube	Key Attributes	Recommended Applications
High Heat Crystal Resins	1200/ 1201	1.6	228	7,600	Yes	High molecular weight and strength; Excellent clarity	Direct injection foam; Biaxially oriented sheet; Glazing sheet
	1290/ 1291	1.6	228	7,600	Yes	Low residual styrene monomer; Low oligomers; White color	Direct injection foam; Biaxially oriented sheet; Glazing sheet
	1300/ 1301	3.0	223	7,100	Yes	High heat resistance and strength	Electronics packaging and medical labware; Cosmetic cases
	1611	6.5	222	6,800	Yes	Good balance of flow, strength and set-up; Blue edge effect	Consumer electronics; Housewares; Cosmetic Packaging
	1700	11.0	219	5,700	No	High flow and heat resistance; No zinc stearate	Foam extrusion ; Masterbatches
	2600/ 2601	3.4	205	6,400	Yes	Good balance of strength and ease of processing; White color	Extrusion & thermoforming; Injection molded parts; Retail displays
General Purpose Crystal Resins	2610/ 2611	3.6	206	2.1	No	Good balance of flow and set-up properties	Appliance parts; blending; Thermoforming and extruded parts
	3100/ 3101	10.0	213	6,500	Yes	Good balance of flow and set-up properties	Single use foodservice; Electronics pkg.; HIPS gloss cap
	3190/ 3191	10.0	213	6,500	Yes	Low residual styrene monomer; White color; High clarity	Single use foodservice; Great for blending
	3600/ 3601	14.0	209	6,200	Yes	Excellent flow characteristics for thin wall and complex parts	Thin wall, multi-cavity molding applications; Masterbatches

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