

Typical properties of HIPS and Application

Properties	Unit	Test Method	High Performance Grades (Note.1)				Conventional Grades				
			ESCR	High Gloss	Super High Impact	Super High Flow	Standard for Injection	Sheet	High Heat	High Impact Sheet	High Strength High Heat
Melt Index (200°C, 5,000 g)	(g/10 min.)	ISO-1133	3	3	2	15	7.5	3	3.5	3	4.5
Tensile Strength (Yield)	(MPa)	ISO-527	22	38	37	23	25	30	35	27	37
Elongation	(%)	ISO-527	50	40	40	50	40	40	50	50	30
Charpy (notched, t = 4.0 mm, +23deg.C)	(kJ/m2)	ISO-179	12	14	22	17	15	14	12	16	10
Charpy (notched, t = 4.0 mm, -30deg.C)	(kJ/m2)	ISO-179	8	-	-	-	-	-	-	-	-
Vicat Softening Point (49N)	(°C)	ISO-306	88	94	96	84	86	91	96	90	96
Gloss 60°	(%)	ISO-306B	15	80	40	30	40	45	35	40	35
Cyclopentane Resistance	(%)	TEC/MCI	70	-	-	-	-	-	-	-	-
Main Application			Inner boxes and liners of refrigerators, etc.	Home electrical appliances, printer, air-conditioner, etc.	Raw Material of Polymer alloys for flame resistance appliance, etc.	Bathroom Panel, and appliance, etc.	Housewares, Food containers, Toys, etc.	Various sheets, Ice cream cups, Food trays, Interior parts for refrigerators, etc.	Housing for home electrical appliances (VTR's, TV's, Radio cassette, tape recorders, air conditioners, etc.)	Thick sheet wall cabinet, Massive food container and cups, etc.	Medium impact polystyrene TV body, Audio, etc.

Note.1 : Optional grades that are ready for license in separate conditions respectively.

TOYO ENGINEERING CORPORATION