

# TOYO STYRENE GPPS

Characteristics			Injection molding			Injection molding (High-strength)		
			Ultra high flow	High flow	Heat resistance	Standard	Heat resistance	Medium flow
Grade Name			G100C	G200C	G320C	MW1C,D	MW2C	MT5D
Melt mass-flow rate (200°C, 5kg)	ISO 1133	g/10min	28	9.0	4.0	1.9	2.7	2.9
Vicat softening temperature (load 50N)	ISO 306	°C	88	89	102	92	95	97
Heat deflection temperature (load 1.8MPa)	ISO 75-2	°C	70	70	81	74	76	78
Charpy impact strength (notched)	ISO 179	kJ/m <sup>2</sup>	1.1	1.4	1.9	2.5	2.2	2.0
Tensile stress at yield	ISO 527-1	MPa	39	41	45	45	46	46
Tensile strain at break	ISO 527-1	%	2	2	3	3	3	3
Flexural strength	ISO 178	MPa	74	80	98	93	93	95
Flexural modulus	ISO 178	MPa	3150	3200	3200	3200	3200	3200
Ball pressure test	ICE 60695-10-2	°C	75	75	95	80	85	90
Flammability (UL94 Classification)	UL 94	-	HB	HB	HB	HB	HB	HB

Characteristics			Extrusion (foaming)		
			Medium molecular weight	High molecular weight	High melt tension
Grade Name			HRM12	HRM26	HRM48N
Melt mass-flow rate (200°C, 5kg)	ISO 1133	g/10min	5.4	1.6	2.2
Vicat softening temperature (load 50N)	ISO 306	°C	102	103	102
Heat deflection temperature (load 1.8MPa)	ISO 75-2	°C	81	82	81
Charpy impact strength (notched)	ISO 179	kJ/m <sup>2</sup>	1.4	2.0	2.1
Tensile stress at yield	ISO 527-1	MPa	45	50	50
Tensile strain at break	ISO 527-1	%	3	3	3
Flexural strength	ISO 178	MPa	95	104	99
Flexural modulus	ISO 178	MPa	3200	3200	3250
Ball pressure test	ICE 60695-10-2	°C	-	-	-
Flammability (UL94 Classification)	UL 94	-	-	HB	-

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※All values and information shown above are subject to revision without notice, they are given