

PMMA
Paintless Black Grade

HI542-S9678

Description

Appropriate for injection molding
Medium impact grade with high scratch resistance
High gloss, High mechanical strength, Excellent weatherability
Recycleable, Environment-friendly, Cost-reduction
Mold flow simulation data is available

Application

Exterior molding garnish, Door frame garnish (B,C,D pillar), Car front grill & rear deco
Side mirror base plate cover

Table

PROPERTY	CONDITION	UNIT	METHOD	VALUE
THERMAL PROPERTIES				
Melt Flow Index	230°C/3.8kg	g/10min	ISO 1133	3.1
Melt Flow Index	220°C/10kg	g/10min	ISO 1133	5.7
VICAT Softening Point	B/50	°C	ISO 306	100
Heat Deflection Temperature	1.8MPa	°C	ISO 75	98
Coefficient of Linear Expansion	-	1/°C	ASTM D696	7X10 ⁻⁵
MECHANICAL PROPERTIES				
Charpy Impact Strength	notched	kJ/m ²	ISO 179	4.5
Rockwell Hardness	M scale (*R)	-	ISO 2039-2	70 / 118(*R)
Tensile Strength at Break	5mm/min	MPa	ISO 527	60
Tensile Strain at Break	5mm/min	%	ISO 527	30
Tensile Modulus	1mm/min	GPa	ISO 527	2.4
Flexural Strength	2mm/min	MPa	ISO 178	83
Flexural Modulus	2mm/min	GPa	ISO 178	2.3
GENERAL PROPERTIES				
Density	-	g/cm ³	ISO 1183	1.19
Mold Shrinkage	-	%	ASTM D955	0.2-0.6
Water Absorption	24hr	%	ASTM D570	0.3
Flammability UL94	1.5mm	Class	IEC 60695-11-10	HB
RECOMMENDED PROCESSING CONDITIONS				
Predrying Temperature	-	°C	-	70-80
Predrying Time in Desiccant-Type Drier	-	hr	-	4-6
Melt Temperature	-	°C	-	210-240
Mold Temperature	-	°C	-	60-80

REMARKS : The listed values should be used for reference purpose only.