

# HI100H

## Description

HI100H is an ABS product for injection molding, designed to have very high impact strength and bright white color.

## Key Features

Bright White, High Impact Strength

## Application

Safety Helmet, Fittings, Miscellaneous Goods

Properties	Condition	Method	Unit	HI100H
<b>Physical</b>				
Specific Gravity	23°C	ASTM D792		1.02
Mold Shrinkage	23°C, 3.2mm	ASTM D955	%	0.4 ~ 0.7
Melt Flow Index	220°C, 10kg	ASTM D1238	g/10min	10
<b>Mechanical</b>				
Tensile Strength at Yield	23°C, 50mm/min, 3.2mm	ASTM D638	MPa	39
Tensile Elongation at Break	23°C, 50mm/min, 3.2mm	ASTM D638	%, (Min)	10
Flexural Strength	23°C, 10mm/min, 6.4mm	ASTM D790	MPa	60
Flexural Modulus	23°C, 10mm/min, 6.4mm	ASTM D790	MPa	2000
Izod Impact Strength	Notched, 3.2mm, 23°C	ASTM D256	J/m	460
Izod Impact Strength	Notched, 6.4mm, 23°C	ASTM D256	J/m	440
Rockwell Hardness	R-Scale	ASTM D785		94
<b>Thermal</b>				
Heat Deflection Temperature	Edgewise, 1.82MPa, 6.4mm, Unannealed	ASTM D648	°C	84
Vicat Softening Temperature	50N, 50°C/h	ASTM D1525	°C	92

## Note

Typical values can be used only for the purpose of selecting material, and there can be variation within normal tolerances for various colors.

Values given should not be interpreted as specification and not be used for designing part or tool.

All properties, except melt flow index are measured by injection molded specimens after 48 hours storage at 23°C, 50% relative humidity.

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## Processing Guide (Injection Molding)

Processing Parameters	Unit	Value
Drying Temperature	°C	70 ~ 80
Drying Time	hrs	3 ~ 4
Injection Temperature	°C	200 ~ 250
Mold Temperature	°C	40 ~ 80
Screw Speed	rpm	30 ~ 60

## Note

Injection Temperature & Screw Speed are only mentioned as general guidelines.

These may not apply or need adjustment in specific situations such as low shot sizes, thin wall molding and gas-assist molding.

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