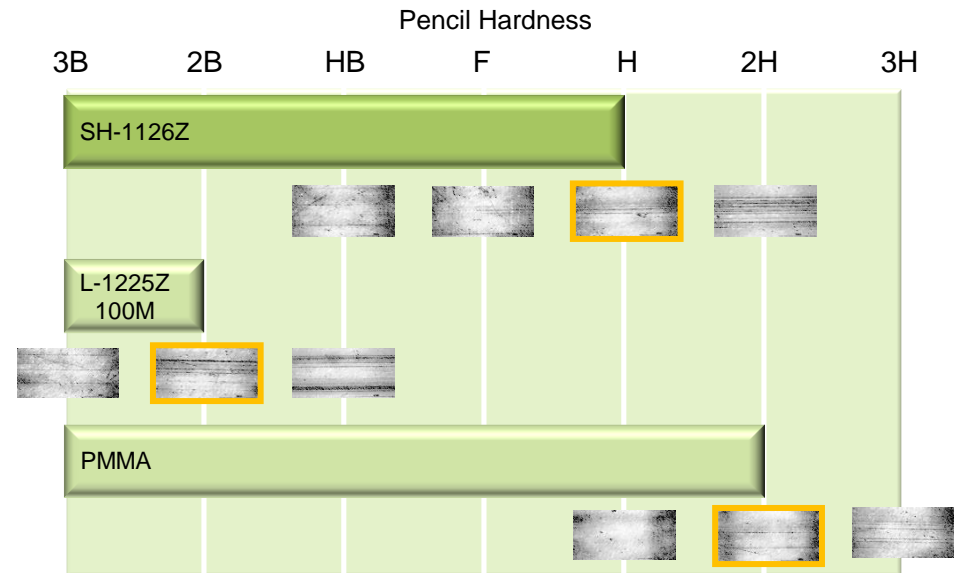


## Introduction

- Panlite SH grade has successfully achieved “Pencil hardness H” that is harder than standard polycarbonate by its molecular structure reviewed and optimized. The grade retains standard polycarbonate features such as high clarity and ball drop impact resistance.
- Since the grade has aesthetic appearance and improved surface hardness, the grade can be used without applying hard coating or painting on its surface. Eliminating secondary process can contribute to additional cost reduction.
- The secondary processes require to use chemical substances like solvents, which environment unfriendly in general. Using SH grade can contribute to keep the globe clean as well.

## Features

- Superior scratch resistance
- Excellent transparency and wide range of coloring.
- Excellent flow ability, suitable for thin wall thickness products.
- High thermal resistance.
- Retain standard polycarbonate features.



## Material Specification

Item	Unit	Standard	Conditions	PC		PMMA
				Panlite SH-1126Z	Panlite L-1225Z 100M	
Density	kg/m <sup>3</sup>	ISO1183	-	1,170	1,200	1,170
Water Absorption	%	ISO 62	23°C/24hr Water Immersion	0.1	0.2	0.3
Total Light Transmittance	%	ASTM	2mm <sup>t</sup>	90	90	92
Tensile Yield Stress	MPa	ISO527-1 ISO527-2	50mm/min	72	62	77
Tensile Fracture Stress	MPa			62	63	60
Tensile Fracture designation distortion	%			90	110	6
Flexural Strength	MPa	ISO178	2mm/min	100	95	140
Flexural Modulus				2,450	2,400	3,300
Charpy Impact Strength(23°C)	kJ/m <sup>2</sup>	ISO179	w/o notch	5	62	<1
			w/ notch	NB	NB	20
Izod Impact Strength(23°C)	kJ/m <sup>2</sup>	ASTM D256	w/o notch	5	62	<1
			w/ notch	NB	NB	14
Pencil Hardness	-	JIS K5600	750g	H	2B	2H
Melt Volume rate	cm <sup>3</sup> /10min.	ISO 1133	300°C/1.2kgf	26	19	-
Load Deflection Temperature	°C	ISO75-1	1.80MPa	113	125	93
		ISO75-2	0.45MPa	126	138	-
Rockwell Hardness	-	ISO 2039-2	M Scale	88	77	101

\* Values on the table above are representative, not guaranteed.

※ In case of require further detail information, please use “Inquiry format” on this web-site.