

POLIMAXX SP100W(A)IRPC Public Company Limited - *Acrylonitrile Butadiene Styrene***General Information****Product Description**

SP100(W) is an ABS grade with a UV additive that provides very high impact strength and weathering performance. It is designed for injection molding processing requiring high impact loading while also preventing yellowness such as appliance & electronic parts and automotive parts.

Industry:

- Appliance & Electronic Parts
- Interior Parts

Product Feature:

- Super High Impact Strength
- Good Stiffness
- Glossy Finish Parts
- Weathering Performance

Regulation Compliance:

- RoHS Directive 2011/65/EU
- REACH Regulation (EC) No. 1907/2006
- UL Yellow Card: E132283

General

Material Status	• Commercial: Active		
Availability	• Asia Pacific	• Europe	• North America
Additive	• UV Stabilizer		
Features	• Good Gloss • Good Stiffness	• Good Weather Resistance • Ultra High Impact Resistance	• UV Stabilized
Uses	• Appliance Components	• Automotive Applications	• Electrical/Electronic Applications
Agency Ratings	• EC 1907/2006 (REACH)	• EU 2011/65/EC	
RoHS Compliance	• RoHS Compliant		
Processing Method	• Injection Molding		

Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity ²	1.05		ASTM D792
Melt Mass-Flow Rate (MFR) (220°C/10.0 kg)	18	g/10 min	ASTM D1238
Molding Shrinkage	0.40 to 0.60	%	Internal Method
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength ³ (Yield, 0.126 in)	6400	psi	ASTM D638
Tensile Elongation ³ (Break, 0.126 in)	20	%	ASTM D638
Flexural Modulus - 1% Secant ⁴ (0.252 in)	313000	psi	ASTM D790
Flexural Strength ⁴ (Yield, 0.252 in)	8680	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (73°F, 0.252 in)	6.4	ft-lb/in	ASTM D256
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale, 0.252 in)	108		ASTM D785
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed, 0.252 in)	185	°F	ASTM D648
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.06 in)	HB		UL 94



Processing Information		
Injection	Nominal Value	Unit
Drying Temperature	176 to 185	°F
Drying Time	2.0 to 4.0	hr
Processing (Melt) Temp	374 to 464	°F
Mold Temperature	122 to 176	°F
Injection Rate	Slow-Moderate	
Notes		
¹ Typical properties: these are not to be construed as specifications.		
² 23°C		
³ 0.20 in/min		
⁴ 0.098 in/min		

