

Technical Data

Product Description

SP100 is a super high impact grade of ABS resin for injection molding process. It is suitable for auto parts (motorcycle component), refrigerator handle, and electrical appliances where need super high impact strength.

General

Material Status	• Commercial: Active		
Literature ¹	• Technical Datasheet (English)		
UL Yellow Card ²	• E132283-222085		
Search for UL Yellow Card	• IRPC Public Company Limited		
Availability	• Asia Pacific	• Europe	• North America
Features	• Food Contact Acceptable	• Ultra High Impact Resistance	
Uses	• Appliance Components • Automotive Applications	• Electrical/Electronic Applications • Handles	
Agency Ratings	• FDA 21 CFR 181.32		
RoHS Compliance	• RoHS Compliant		
Processing Method	• Injection Molding		

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Melt Mass-Flow Rate (MFR) (220°C/10.0 kg)	18 g/10 min	18 g/10 min	ASTM D1238

Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength (Yield, 73°F (23°C))	6400 psi	44.1 MPa	ASTM D638
Flexural Modulus (73°F (23°C))	313000 psi	2160 MPa	ASTM D790
Flexural Strength (Yield, 73°F (23°C))	9250 psi	63.7 MPa	ASTM D790

Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Notched Izod Impact 73°F (23°C), 0.250 in (6.35 mm)	6.2 ft·lb/in	330 J/m	ASTM D256

Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Rockwell Hardness R-Scale, 73°F (23°C), 0.250 in (6.35 mm)	110	110	ASTM D785

Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load 66 psi (0.45 MPa), Unannealed, 0.250 in (6.35 mm)	194 °F	90.0 °C	ASTM D648
264 psi (1.8 MPa), Unannealed, 0.250 in (6.35 mm)	183 °F	84.0 °C	

Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
Flame Rating (0.06 in (1.5 mm))	HB	HB	UL 94

Injection	Nominal Value (English)	Nominal Value (SI)
Drying Temperature	176 to 185 °F	80 to 85 °C
Drying Time	2.0 to 5.0 hr	2.0 to 5.0 hr
Processing (Melt) Temp	374 to 464 °F	190 to 240 °C

Notes

¹ These links provide you with access to supplier literature. We work hard to keep them up to date; however you may find the most current literature from the supplier.

² A UL Yellow Card contains UL-verified flammability and electrical characteristics. UL Prospector continually works to link Yellow Cards to individual plastic materials in Prospector, however this list may not include all of the appropriate links. It is important that you verify the association between these Yellow Cards and the plastic material found in Prospector. For a complete listing of Yellow Cards, visit the UL Yellow Card Search.

³ Typical properties: these are not to be construed as specifications.



Where to Buy

Supplier

IRPC Public Company Limited
, Thailand
Telephone: +66-2-678-5000
Web: <http://www.irpcmarket.com/>

Distributor

API-Kolon Engineering Plastics
Telephone: 847-550-5556
Web: <http://www.apikolon.com/>
Availability: Mexico, North America, South America

Click Plastics AG
Click Plastics AG is a Pan European distribution company. Contact Click Plastics for availability of individual products by country.
Telephone: +49-6251-770-690-0
Web: <http://www.clickplastics.com>
Availability: Germany

PolySource
Telephone: 866-558-5300
Web: <http://www.polysource.net/>
Availability: North America

Resinal de México
Telephone: +52-55-5254-7600
Web: <http://resinal.mx/>
Availability: Mexico

Southland Polymers
Southland Polymers - Full Service Engineering and Commodity Resin Distribution Since 1979
Telephone: 562-921-0444
Web: <http://www.southlandpolymers.com/>
Availability: Central America, North America, South America

