

# Royalite R26

Acrylonitrile Butadiene Styrene

Spartech Plastics

## Message:

ROYALITE® R26 thermoplastic sheet is a special ABS product that provides an unusual combination of very high tensile strength, impact strength and stiffness, coupled with outstanding formability. Upon request, this Royalite sheet can be formulated to comply with current FDA and NSF requirements for food handling equipment and devices. Combining these special features with the wide range of colors and finishes available gives the greatest possible freedom in meeting application requirements.

### APPLICATIONS:

In addition to the properties mentioned previously, ROYALITE® R26 sheet features high hardness. Together, these qualities have made ROYALITE® R26 sheet the product of choice in a wide range of severe-service applications including luggage, auditorium seating, food handling trays and boxes, and motorcycle fairings.

### PROCESSING:

ROYALITE® R26 thermoplastic sheet can be processed on virtually all thermoforming equipment from high volume, multi-station rotary machines to hand-operated presses. It is readily hand-formed for prototyping. It is also suitable for use with aluminum and epoxy molds and fine grain wood molds such as mahogany. Care must be taken in forming so as not to overheat the sheet. Stock temperatures of approximately 340°F-390°F are recommended for proper forming. As with any thermoplastic material, care should be taken to account for the coefficient of thermal expansion when considering design parameters. Please contact Royalite for data relating to a specific application or equipment.

### COLORS & TEXTURES:

ROYALITE® R26 is offered in a tremendous range of colors with a multitude of textures ranging from smooth to deep-textured. This Royalite product is normally capped with calendered film, which gives exceptional color and gloss control, plus outstanding grain retention after forming.

### FINISHING:

With conventional plastic fabricating tools, it is possible to machine, saw, drill, rout and grind this rigid Royalite sheet. It can be punched and die-cut, and paints can be applied by spray, silk screen or roller coating. For optimum performance, paints formulated for plastics must be used. As long as proper procedures are followed, this material can be joined to other materials, or itself, by adhesive bonding, ultrasonic welding and by mechanical fasteners such as screws and rivets. Please contact Royalite for specific recommendations.

### AVAILABILITY:

ROYALITE® R26 is available from our warehouse with standard dimensions of 54" x 94" in a medium grey color in either a Smooth or Saddle #2 texture in gauges ranging from 0.125" to 0.250". Specific blank sizes can be cut to order for an extra charge. For a specific listing of our warehouse offerings, please contact us or our nearest distributor. Warehouse material can normally ship within 72 hours of receipt of the order.

Other standard and custom colors, grain textures, gauges and blank sizes are available subject to normal production scheduling. Maximum capped width available is 54". Maximum uncapped width available is 88". Maximum gauge is 0.375". Widths and gauges outside the standard are available with some restrictions.

General Information	
Features	Ultra-high impact resistance
	Ultrasonic weldable
	Rigidity, high
	High tensile strength
	Sprayable
	Machinable
	Adhesiveness
	Good adhesion
	Heat resistance, high
	High hardness
Uses	Leather case
	Application in Automobile Field
	Food container

Bracket tray

Seat

Appearance	Available colors		
Forms	Sheet		
Processing Method	Thermoforming		
Physical	Nominal Value	Unit	Test Method
Specific Gravity <sup>1</sup>	1.02 - 1.08	g/cm <sup>3</sup>	ASTM D792
Molding Shrinkage - Flow	0.50 - 0.70	%	
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale)	96		ASTM D785
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength - Flow (Yield)	35.9	MPa	ASTM D638
Flexural Modulus	2000	MPa	ASTM D790
Flexural Strength	58.6	MPa	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact			ASTM D256
-29°C	190	J/m	ASTM D256
22°C	400	J/m	ASTM D256
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (1.8 MPa, Unannealed)	98.9	°C	ASTM D648
CLTE - Flow	7.6E-5 - 1.0E-4	cm/cm/°C	ASTM D696
Thermal Conductivity	0.25 - 0.30	W/m/K	ASTM C177
Flammability	Nominal Value		Test Method
Flammability	Passes		FMVSS 302
Thermoforming Molding Temperature - Machine	171 - 199	°C	
NOTE			
1.	Color dependent		

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

#### Recommended distributors for this material

### Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China



WECHAT