

# Royalite® R12

Rigid ABS sheet

## Product Description

Royalite® R12 is a rigid, thermoplastic ABS sheet solution with exceptionally good high heat performance. Its thermoformability partnered with its ability to maintain its strength at elevated temperatures make Royalite® R12 a popular solution for applications which require resistance to vibration and movement as well as sterilization from boiling water.

## Technical Properties

Property	Test Method	Value*
Specific Gravity (color dependent)	ASTM D-792	1.02 - 1.08
Izod Impact (Notched) 72°F	ASTM D-256	4.5 ft-lbs/in
Izod Impact (Notched) -20°F	ASTM D-256	1.8 ft-lbs/in
Tensile Strength	ASTM D-638	5,400 psi
Flexural Strength	ASTM D-790	8,900 psi
Flexural Modulus	ASTM D-790	280,000 psi
Rockwell Hardness (R Scale)	ASTM D-785	96
Heat Deflection Temperature (@264 psi - annealed)	ASTM D-648	220°F
Thermal Conductivity	ASTM C-177	1.7 - 2.1 BTU/in/hr/ft <sup>2</sup> /°F
Coefficient of Linear Thermal Expansion	ASTM D-696	4.2 - 5.6 x10 <sup>-5</sup> in/in/°F
Mold Shrinkage	Internal	0.005 - 0.007 in/in

*\*All values based on 0.125" unless otherwise stated*

For additional information, please contact Spartech at 800-677-4338 (800-67-SHEET), e-mail [info@spartech.com](mailto:info@spartech.com) or visit our website at [www.spartech.com](http://www.spartech.com)

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