

Royalite® R52

Fire-rated sheet

Product Description

Royalite® R52 thermoplastic sheet provides a fire-rated*, rigid PVC/acrylic product that combines very high impact strength, tensile strength, stiffness and hardness with excellent formability. It is recognized under the component program of Underwriters Laboratories, Inc. with a classification of UL94V-0 at 0.027" gauge and UL94-5VA at 0.051" gauge. Royalite® R52 sheet has excellent chemical and stain resistance.

* This term and any corresponding data refer to typical performance in the specific tests indicated and should not be construed to imply this material's behavior under actual fire conditions.

Technical Properties

Property	Test Method	Value*
Specific Gravity (color dependent)	ASTM D-792	1.35
Tensile Strength	ASTM D-638	5,800 psi
Flexural Strength	ASTM D-790	9,500 psi
Flexural Modulus	ASTM D-790	320,000 psi
Izod Impact (Notched) 72°F	ASTM D-256	15.0 ft-lbs/in
Izod Impact (Notched) -40°F	ASTM D-256	0.8 ft-lbs/in
Rockwell Hardness (R Scale)	ASTM D-785	100
Heat Deflection Temperature (@264 psi - annealed)	ASTM D-648	150°F
Thermal Conductivity	ASTM C-177	1.01 BTU/in/hr/ft ² /°F
Coefficient of Linear Thermal Expansion	ASTM D-696	4.0 - 6.0x10 ⁻⁵ in/in/°F
Motor Vehicle Safety Standard	FMVSS 302	Passes
Flammability	UL 94 V-0	Listed @ 0.027"
Flammability	UL 94-5VA	Listed @ 0.051"
Flammability	UL 94-5VB	Listed @ 0.031"
Flame Spread Index	ASTM E-162	<6
Flammability - Vertical Burn - 12 second	FAR 25.853a (i)	Passes @ 0.028"
Flammability - Vertical Burn - 60 second	FAR 25.853a (ii)	Passes @ 0.028"

*All values based on 0.125" unless otherwise stated and no use of customer regrind

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

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