



Royalite R-59

A UL rated V-O ABS/PVC product, ROYALITE R-59 is an example of the numerous FR ABS products available from PORT PLASTICS, INC.

Toughness, versatility and formability make this product ideal for use in business machine covers, guards and a host of applications needing to meet the UL94V-0 standard for flame retardancy.

Sheet: .040 - .250 Thick (Standard)
Size: 48" x 96", 54" x 94" standard
(other sizes available with minimum orders)
Textures: 24 available

Note: Other FR ABS products are available which meet standards such as FAR 25.853, ASTM E-162 and ASTM E-662. Consult your local branches for details.

UL Classification	Thickness
UL-94 V-1 UL-94 V-0	Below .085 .085 and above

Physical Properties (Units)	Average Values	ASTM
Specific Gravity	1.18-1.25	D792
Tensile Strength, machine direction (psi)	4700	D638
Flexural Strength @ 72°F (psi)	7700	D790
Flexural Modulus @ 72°F (10 ⁵ psi)	2.7	D790
Impact Strength@ 72°F (ft-lb/in notch)	7.0	D256
Notched Izod @ 20°F (ft-lb/in notch)	1.8	
Heat Defection@ 264 psi fiber stress (°F)	175	D648
Temperature @ 66psi fiber stress (°F)	190	
Coefficient of Thermal Expansion (in/in/°Fx10 ⁻⁵)	4.6-5.5	D696
Mold Shrinkage (in/in)	0.005-0.007	-
Flammability Rating*		-
Motor Vehicle Rating	Passes	MVSS 302
Underwriters Lab	Listed ⁽¹⁾	UL94V-0
Underwriters Lab	Listed ⁽¹⁾	UL94V-1
Underwriters Lab	Listed ⁽¹⁾	UL94-5VA

Color dependent: (1) All colors at 0.85" (2.16mm) and above, (2) All colors at 0.58" (1.47mm) and above

Processing:

You can process ROYALITE® R59 thermoplastic sheet on virtually all thermoplastic equipment from high volume, multi-station rotary machines to hand-operated presses. It is readily handformed for prototyping, and is suitable for use with aluminum and epoxy molds and fine-grain wood molds such as mahogany. This material is also excellent for pressure applications. Because ROYALITE R59 sheet is an ABS/PVC alloy, care must be taken in forming so as not to overheat the sheet. Stock temperatures of approximately 330-380°F are recommended for proper forming. Please contact PORT PLASTICS for data relating to your specific application and equipment.