



Royalite™ R24

Fire-rated Sheet

PRODUCT DESCRIPTION

Royalite™ R24 is a fire-rated ABS thermoplastic sheet that is UL listed 94HB @ 0.060 and above that is available in all colors. Manufactured using our proprietary cap sheet technology, R24 sheet combines high impact strength and stiffness with excellent formability.

VALUE SOLUTION

Meet product flame-rating requirements while maintaining outstanding toughness and durability

The combination of fire-rated properties with durability, stiffness and strength makes Royalite R24 sheet an exceptional choice for a variety of applications. An excellent balance of properties, this sheet also has superior forming characteristics, making it an ideal material for complex configurations.

KEY CHARACTERISTICS

- Fire-rated capabilities
- UL94 HB at 0.060 and above
- MVSS 302 at 0.050 and above
- Enhanced heat deflection temperature of 210°F (99°C)

Additional features include:

- Available in a variety of colors and over 16 grain patterns
- Provides outstanding color and gloss control
- Maintains superior grain retention after thermoforming

TARGET MARKET AND APPLICATIONS

A strong balance of properties with critical flammability ratings makes R24 sheet a proven choice for many of today's demanding applications, including office or business machine housing, medical and diagnostic equipment and electronics enclosures.



TECHNICAL PROPERTIES

PROPERTY	TEST METHOD	UNITS	DATA†
Specific Gravity†	D-792		1.08–01.02†
Tensile strength, machine direction	D-638	(psi)	5,000
Impact Strength @ 73°F Notched Izod	D-256	(ft-lbs/in touch)	7.5
Impact Strength @ 73°F Garner Drop Weight	D-5420	(in-lbs)	320
Flexural Strength	D-790	(psi)	7,800
Flexural Modulus	D-790	(kpsi)	280
Hardness	D-785	Rockwell Scale R	98
Heat deflection @264psi temperature (annealed)	D-648	(°F)	210
Thermoforming T emperature Range		(°F)	340–395
Mold Shrinkage		(in/in)	0.005–0.007

FLAMMABILITY RATING*

Underwriters Lab		UL 94HB	Listed .060
Motor Vehicle Standard		MVSS 302	Passes

‡ All values based on 0.125" thickness unless otherwise noted.

† Color dependent

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