



Royalite™ R23

Rigid High-Performance ABS

PRODUCT DESCRIPTION

Royalite™ R23 thermoplastic sheet is an economical, rigid ABS product that provides an excellent balance of properties not available in most low cost ABS sheets. It combines medium-impact strength and outstanding formability with high tensile strength, high stiffness and effective both low and high temperature performance.

VALUE SOLUTION

Control costs without sacrificing performance and versatility

Fabricators are often faced with forming difficult parts. Royalite R23 sheet provides exceptional formability without high cost sheets. This versatile, rigid sheet can be punched and die-cut. Paints can be applied by spray, silk-screen or roller coating. With conventional plastic fabricating tools, it is possible to machine, saw, drill, rout and grind this sheet as well. And, with a wide range of colors and a multitude of textures ranging from smooth to deep-textured, Royalite R23 sheet gives thermoformers a full complement of choices for better customer satisfaction.

KEY CHARACTERISTICS

- Versatility in processing on all types of thermoforming equipment
- Outstanding formability
- Ideal for medium-impact applications
- Readily hand-formed for prototyping
- Good for pressure forming applications
- Economical

TARGET MARKET AND APPLICATIONS

The truly exceptional formability of Royalite R23 sheet has made it the fabricator's choice for difficult parts in a wide variety of applications. Typical applications range from office or patio furniture, to specialized cases, or to machine guards and housings. An optional weatherable cap sheet may be requested to provide the extra benefit of weatherability for exterior applications.

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TECHNICAL PROPERTIES

PROPERTY	TEST METHOD	UNITS	DATA
Specific gravity	D-792		1.03-01.05 [†]
Tensile strength, machine direction	D-638	(psi)	4,500
Flexural strength	D-790	(psi)	8,700
Flexural modulus	D-790	(psi)	280,000
Impact strength, Notched Izod	D-256	(ft-lbs/in notch)	4.0
Hardness	D-785	Rockwell Scale R	96
Heat deflection @264psi temperature (annealed)	D-648	(°F)	200
Impact strength, gardner drop weight	ASTM D-5420	In-lbs	125 ²

FLAMMABILITY RATING*

Motor Vehicle Standard		FMVSS 302	Passes
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[†] Color Dependent

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