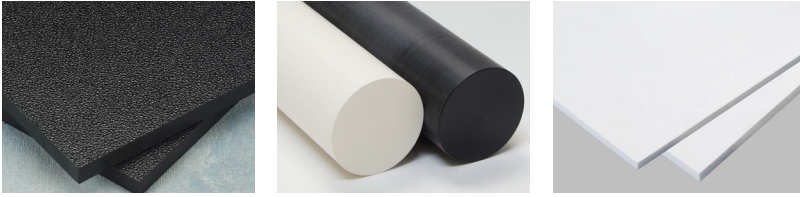


# ABS

Outstanding impact resistant low cost plastic,  
easy to machine and thermoform



ABS is a low cost plastic material with outstanding impact resistance, machinability, and thermoforming characteristics. It is an excellent choice for machine housings, retail store fixtures, and point-of-purchase displays when impact resistance or durability is required.

ABS plastic is available in general purpose, machine grade, fire-rated, UV resistant, orthotic grade, FDA compliant grade, and scratch resistant grades in a variety of textures and colors.

## ABS Material Options

**Royalite® R20** – thermoplastic sheet is a rigid ABS product with a combination of properties that makes it ideal for the widest range of applications. It has very high impact strength and stiffness, excellent high and low temperature performance, and outstanding formability.

**Royalite® R59** – is a fire-rated ABS/PVC alloy sheet material, that is often used for transportation, architectural, and electronics applications that require UL certifications.

**Royalite® R57** – thermoplastic sheet is a fire-rated, rigid ABS/PVC product specifically developed to meet Federal Aviation Administration requirements. It passes FAR 25.853b at 0.047" and above. It combines its light weight with very high impact strength, high tensile strength and stiffness, and excellent formability and ductility.

**ABS Sheet for O&P** – ABS has excellent thermoforming characteristics. Because of this, it is commonly used for back braces and fabric brace stiffening panels.

## ABS is widely used for:

- Machine housings, guards, and covers
- Instrument panels
- Models and prototypes
- Point-of-purchase displays
- Storage cases and display bases
- Thermoformed displays, trays, and tote bins

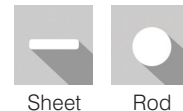
## Performance characteristics:

- Outstanding impact resistance
- Easy to thermoform
- Easy to machine
- Easy to bond with adhesives
- Strong and stiff
- Low cost

## Common brands:

- Royalite®
- Polystone®
- TECARAN™

## Available in:



Sheet

Rod

## TYPICAL PROPERTIES OF ABS

	UNITS	ASTM Test	ABS
Tensile strength	psi	D638	4,100
Flexural modulus	psi	D790	304,000
Izod impact (notched)	ft-lbs/in of notch	D256	7.7
Heat deflection temperature @ 264 psi	°F	D648	177
Maximum continuous service temperature in air	°F		160
Water absorption (immersion 24 hours)	%	D570	0.30
Coefficient of linear thermal expansion	in/in/°Fx10 <sup>5</sup>	D696	5.6

Values may vary according to brand name. Please ask your Curbell Plastics representative for more specific information about an individual brand.