

## **ABS (Acrylonitrile-Butadiene-Styrene)**

ABS (Acrylonitrile-Butadiene-Styrene) is a copolymer composed of two copolymers. This combination of the two copolymers gives ABS an excellent combination of strength, rigidity, and toughness.

### Typical Properties of ABS

PROPERTY	ASTM or UL Test	ABS
<b>PHYSICAL</b>		
Density (lb/in <sup>3</sup> )	D792	0.038
(g/cm <sup>3</sup> )		1.04
Water Absorption, 24 hrs (%)	D570	-
<b>MECHANICAL</b>		
Tensile Strength (psi)	D638	6,500
Tensile Modulus (psi)	D638	340,000
Tensile Elongation at Break (%)	D638	25
Flexural Strength (psi)	D790	11,000
Flexural Modulus (psi)	D790	320,000
Compressive Strength (psi)	D695	-
Compressive Modulus (psi)	D695	-
Hardness, Rockwell	D785	R105
IZOD Notched Impact (ft-lb/in)	D256	7
<b>THERMAL</b>		
Coefficient of Linear Thermal Expansion (x 10 <sup>-5</sup> in./in./°F)	D696	5.3
Heat Deflection Temp (°F / °C) at 264 psi	D648	215 / 102
Melting Temp (°F / °C)	D3418	- / -
Max Operating Temp (°F / °C)	-	140 / 60
Thermal Conductivity (BTU-in/ft <sup>2</sup> -hr-°F)	C177	-
(x 10 <sup>-4</sup> cal/cm-sec-°C)		-
Flammability Rating	UL94	H-B
<b>ELECTRICAL</b>		
Dielectric Strength (V/mil) short time, 1/8" thick	D149	-
Dielectric Constant at 60 Hz	D150	-
Dissipation Factor at 60 Hz	D150	-
Volume Resistivity (ohm-cm)at 50% RH	D257	1015

Length, width, thickness, and diameter sizes and color may vary depending on manufacturer. Values may vary based on brand name. For more information on a specific brand name, contact Vanderveer Industrial Plastics at 714-579-7700.

All statements, technical information and recommendations contained in this publication are presented in good faith, based upon tests believed to be reliable and practical field experience. The reader is cautioned, however, that Vanderveer Industrial Plastics, cannot guarantee the accuracy or completeness of this information, and it's the customers responsibility to determine the suitability of specific products in an given application.

Vanderveer Industrial Plastics has been supplying Sheet, Rod, and Tube for over 60 years!



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