

ABS Data Sheet

Physical Properties

PROPERTIES	ASTM METHOD	UNIT	VALUE
General			
Specific Gravity	D-792	g/cm ³	1.07
Water Absorption	D-570	% @ 24 hrs	0.2-0.6
Light Transmission	D-1003	%	N/A
Dielectric Strength	D-149	Volts/Mil	350-500
Mechanical			
Notched Izod Impact	D-256	J/m	235
Tensile Strength	D-638	MPa	43
Flexural Strength	D.790	MPa	65
Hardness Rockwell	D-785	M or R	R103
Thermal			
Cont. Working Temp.		°C	80°
Vacforming Temp.		°C	140-190°
Thermal Expansion	D-696	10 ⁻⁵ /°C	9.5

Fabrication

Sawing, Cutting, Drilling & Guillotining: A circular saw blade with carbide teeth utilising the triple chip tooth design is preferred for thicker gauges. For drilling, use conventional drill bits with the standard drill angles and a negative rake. Other suitable methods for cutting ABS sheet include: shearing, blanking and punching. Shears produce straight-edged cuts, while blanking dies and punches can produce a wide variety of shapes. Appropriate clearance angles are required.

Forming: ABS can be thermoformed using typical strip heating and vacuum forming equipment. ABS inherently tends to absorb moisture, under unfavourable storage conditions. Despite storage precautions, it may be necessary to predry ABS sheet in a freely suspended drying area at 70 C for at least 2 hours immediately before forming. Moist sheet will give rise to the formation of surface blisters during the thermoforming process.

Cementing: ABS can be successfully bonded using Weldon 2354.

N.B. For sheet sizes, gauges and colours, refer to your price list, or contact Allplastics Pty Ltd.

The information detailed in this Data Sheet, is provided in good faith and should only be used as a general guide. For further information on various processes and technical properties, contact Allplastics Pty Ltd.