



## Acrylonitrile Butadiene Styrene

Aortha ABS (**Acrylonitrile Butadiene Styrene**) sheeting is a general purpose material that suits most applications where robustness is paramount.

It has very good toughness with a high degree of rigidity, and heat resistance. It is suited for both vacuum and press forming.

During thermoforming the use of a heated steel or aluminium mould is strongly advised. The ABS material is easy to thermoform and has a broad visco-elastic range that gives good melt strength over a large temperature.

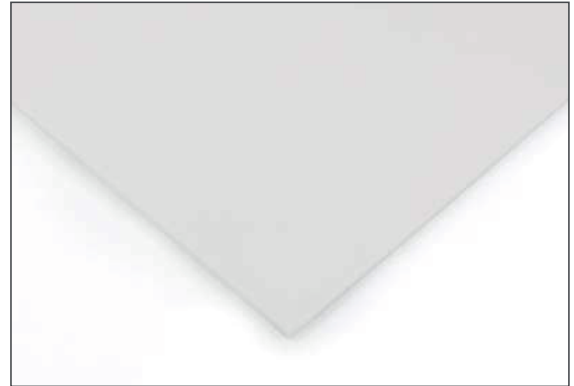
Typical thermoforming temperatures: 150-185°C.

### General features:

- ☒ Very good impact strength compared to most polymer types
- ☒ High rigidity
- ☒ Easy to thermoform
- ☒ Lightweight
- ☒ Versatile

### Applications:

Heel Caps, Orthopaedic Helmets



### Availability:

Code	Sheet Size	Thickness	Colour
TA0176	2440 x 1220mm	2mm	White ○
TA0177	2440 x 1220mm	3mm	White ○
TA0178	2440 x 1220mm	4.5mm	White ○
TA0179	2440 x 1220mm	6mm	White ○
TA0172	2440 x 1220mm	2mm	Black ●
TA0173	2440 x 1220mm	3mm	Black ●
TA0171	2440 x 1220mm	4.5mm	Black ●
TA0175	2440 x 1220mm	6mm	Black ●

### Material Properties:

Properties	Unit	Standard	Method	Value
Density*	g/cm <sup>3</sup>	ISO 1183	-	1.06
Impact Notched	KJ/m <sup>2</sup>	ISO 180	1A at 23°C	30
Tensile Strength	MPa	ISO 527	50 mm/min	44
Flexural Strength	MPa	ISO 178	2mm/min	72
Vicat Softening Point	°C	ISO 306	A/oil	104
Heat Distortion Temperature	°C	ISO 75	HDT/A 1.8 MPa	93
Flammability Ring	Rating	UL94	2.0mm	HB

\*The density quoted should be used as a guide.