

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.

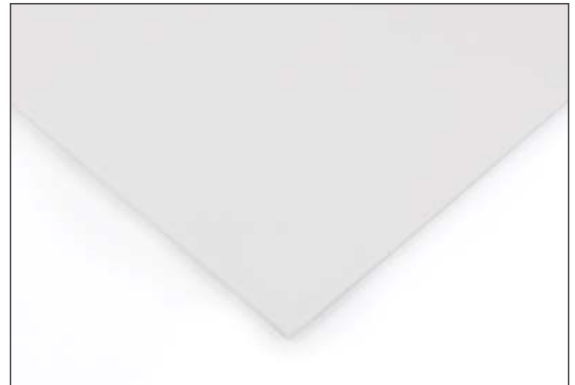
Typical thermoforming temperatures: 150-185°C.

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 ³ | ISO 1183 | - | 1.06 |
| Impact Notched | KJ/m ² | 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.