

Thermoplastic Copolyester

Aortha Dynamic sheets are made of transparent **thermoplastic Copolyester**.

Offering high impact strength, Dynamic can be rapidly thermoformed at low energy consumption and can withstand extreme degrees of stretching.

Owing to the excellent flow and mould surface reproduction, Dynamic sheeting can be thermoformed at low temperatures requiring little energy for producing applications.

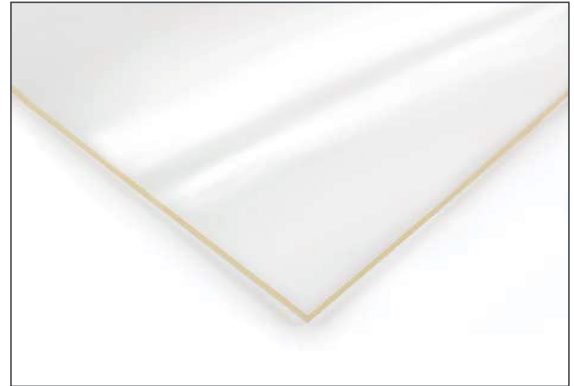
Typical thermoforming temperatures: 60-80°C.

General features:

- ☒ Excellent thermoformability
- ☒ Good impact strength
- ☒ High breakage resistance
- ☒ Easy to fabricate, form and bond

Applications:

Prostheses, Specialist Equipment



Availability:

(Sheeting)

Code	Sheet Size	Thickness	Colour
TA0372	2050 x 1250mm	2mm	Trans <input type="radio"/>
TA0373	2050 x 1250mm	3mm	Trans <input type="radio"/>
TA0375	2050 x 1250mm	5mm	Trans <input type="radio"/>
TA0376	2050 x 1250mm	6mm	Trans <input type="radio"/>
TA0379	2050 x 1250mm	9mm	Trans <input type="radio"/>
TA0382	2050 x 1250mm	12mm	Trans <input type="radio"/>
TA0385	2050 x 1250mm	15mm	Trans <input type="radio"/>

Availability:

(Prosthetic Squares)

Code	Sheet Size	Thickness	Colour
TA3230	343 X 343mm	9mm	Trans <input type="radio"/>
TA3231	343 X 343mm	12mm	Trans <input type="radio"/>
TA3232	343 X 343mm	15mm	Trans <input type="radio"/>
TA3233	406 x 406mm	3mm	Trans <input type="radio"/>
TA3234	406 x 406mm	5mm	Trans <input type="radio"/>
TA3235	406 x 406mm	6mm	Trans <input type="radio"/>
TA3236	406 x 406mm	9mm	Trans <input type="radio"/>
TA3237	406 x 406mm	12mm	Trans <input type="radio"/>
TA3238	406 x 406mm	15mm	Trans <input type="radio"/>
TA3240	508 x 508mm	9mm	Trans <input type="radio"/>
TA3241	508 x 508mm	12mm	Trans <input type="radio"/>
TA3242	508 x 508mm	15mm	Trans <input type="radio"/>

Material Properties:

	Test Conditions	Typical Values	Unit	Test Method
Density		1.27	g/cm ³	ISO 1183-1
Moisture absorption	after storage in standard climate 23°C/50% r.F.	0.2	%	ISO 62-4
	after storage in water at 23°C until saturation	0.6	%	ISO 62-1
Refractive index	20 °C	1.567	-	ISO 489
Tensile stress at yield		> 45	MPa	ISO 527-2/1B/50
Elongation at yield		4	%	ISO 527-2/1B/50
Tensile strength		> 45	MPa	ISO 527-2/1B/50
Elongation at break		> 35	%	ISO 527-2/1B/50
Elastizitätsmodul		2020	MPa	ISO 527-2/1B/50
Elastic Modulus		ca. 80	Mpa	ISO 178
Limiting flexural stress	Charpy, unnotched	no break	KJ/m ²	ISO 179/1fU
	Charpy notched	ca. 7	KJ/m ²	ISO 179/1eA
	Izod notched	ca. 6	KJ/m ²	ISO 180/1A
VICAT softening temperature	Method B50	80	°C	ISO 306
Thermal conductivity		0.2	W/m K	DIN 52612
Coeff. of linear thermal expansion		0.05	mm/m K	DIN 53752-A
Heat deflection temperature under load	Method A: 1.80 MPa	63	°C	ISO 75-2
	Method B: 0.45 MPa	70	°C	ISO 75-2
Dielectric strength		20	kV/mm	IEC 60243-1
Volume resistivity		10 ¹⁵	Ohm-cm	IEC 60093
Surface resistivity		10 ¹⁶	Ohm	IEC 60093
Dielectric constant	at 10 ³ Hz	2.6		IEC 60250
	at 10 ⁶ Hz	2.4		IEC 60250
Dissipation factor	at 10 ³ Hz	0.005		IEC 60250
	at 10 ⁶ Hz	0.02		IEC 60250