

OMEGA-CLEAR[®] Polyester Terephthalate Glycol (PETG)



Tel: (08) 9412 3999 17 Biscayne Way, JANDAKOT WA 6164
Email: polytech@acrifabmanufacturing.com.au
www.polytech-plastics.com.au

OMEGA-CLEAR® Polyester Terephthalate Glycol (PETG) sheet is a transparent and extruded co-polyester that contains glycol. It has many applications and is extremely ease to manipulate and form even at low temperatures. It is a new generation material which exhibits excellent optical clarity combined with impact strength second only to Polycarbonate.

MAIN ADVANTAGES OF OMEGA-CLEAR® PETG SHEET

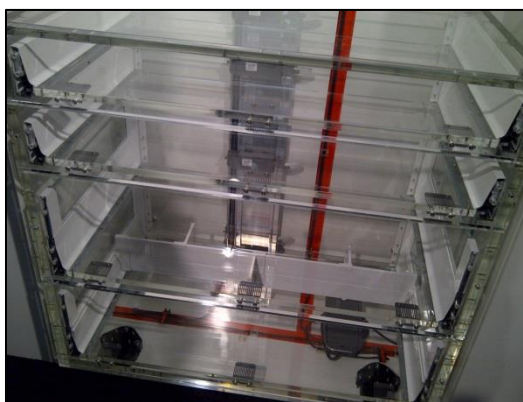
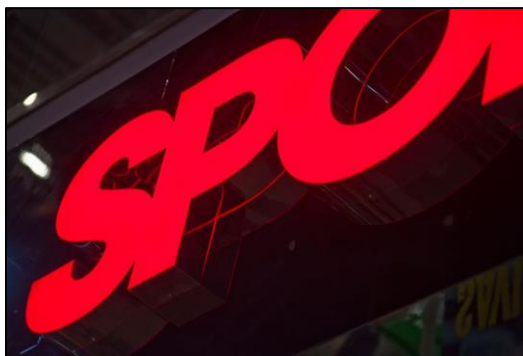
- Excellent toughness, combined with clarity
- Very low processing time due to rapid take on and give off of heat
- Very high chemical resistance
- UL-94 , V-2 flammability rating
- Easy to work with – can be bent, glued, welded and thermoformed
- Suitable for food use
- Excellent resistance against impacts
- Can be sterilized by radiation without discolouration
- High resistance to chemical attack
- Excellent transparency

WEAKNESSES OF OMEGA-CLEAR® PETG SHEET

- Only readily available in sheet up to 4.5mm thick

APPLICATIONS

- Shopfittings & Displays
- Architectural glazing
- Outdoor signage
- Baking, confectionary and other food industries
- Electronic component packaging
- Graphic arts
- Blister packaging
- Medical packaging



DELIVERY PROGRAM

SHEETS: 3050 x 2050mm, 2440mm x 1220mm,

THICKNESSES: 0.5mm, 0.75mm, 1mm, 1.5mm, 2mm, 3mm, 4.5mm, 6mm, 8mm, 10mm, 12mm

PROPERTIES of OMEGA-CLEAR® Polyester Terephthalate Glycol

Criteria	Test Method	Units	PETG
PHYSICAL			
Specific Gravity	ISO 1183	g/cm ³	1,27
Specific Volume	ISO 1183	cm ³ /g	0,79
THERMAL			
Min Service Temp		°C	-40
Max Service Temp		°C	60
Max Service Temp Short Term		°C	70
Thermal Conductivity	ISO 22007	W/(mK)	-
Deflection temperature at 1.80Mpa	ISO 75	°C	65
Deflection temperature at 0.45Mpa	ISO 75	°C	70
Glass Transition	DSC	°C	81
Vicat Softening Temp	ISO 306	°C	85
Flammability	UL-94	at 1.1mm thickness	HB
Coefficient of Linear Expansion	ISO 11359	10 ⁻⁵ m/m°C	5,1
MECHANICAL			
Hardness	ISO2039	Rockwell	R 104-M 112
Notched Impact (Charpy)	ISO179	KJ/m ²	2,2
Unnotched Impact	ISO180	J/m	no br.
Wear			2
Tensile Strength	ISO178	MPa	26,2
Elongation at Break	ISO527	%	54-210
Flexural Strength	ISO178	MPa	77
Flexural Modulus	ISO178	MPa	3.12x10 ⁵
ELECTRICAL			
Dielectric Strength	IEC250	Kv/mm	16,1
Dielectric Constant	IEC250	at 1kHz	2,6
Volume Resistivity	IEC 093	Ω. Cm	10 ¹⁵
Dissipation Factor	IEC 250	at 1kHz	0,005
CHEMICAL			
Good Resistance			Chemical attack
Food Safe	FDA		YES

Tel: (08) 9412 3999 17 Biscayne Way, JANDAKOT WA 6164

Email: polytech@acrifabmanufacturing.com.au

www.polytech-plastics.com.au