

### Applications

- Shields
- POP, merchandiser displays
- Sign/graphic holders, panels
- Machine guards, housings
- Prototypes, models
- Glazing

### Advantages

- High impact strength
- Good clarity
- Easily formed, diecut, and punched
- Gamma and ETO sterilizable
- Broad chemical resistance

### Performance Characteristics

FDA compliant

### Grades

- Static Control
- Mirror

*NOTE: Several grades of this material are available. For additional information regarding this plastic, contact your Emco Industrial Plastics representative or call (800) 292-9906.*

## Polyethylene Terephthalate

### PET-G

#### [ PolyEthleneTerephthalate Glycol ]

PET-G, glycol-modified polyethylene terephthalate, is a high impact resistant copolyester that is a clear amorphous thermoplastic. PET-G offers high stiffness, hardness, and toughness as well as good impact strength.

Additional main benefits of PET-G are high clarity, surface gloss retention, FDA acceptability for food contact, an absence of stress whitening, acceptance of inks and paints, and ease of processing, but most importantly, affordable price. This combination of properties make PET-G a viable alternative to acrylics, well-suited for various demanding sheet and glazing applications ranging from store displays to signage.

Sheet form PET-G has the impact strength, fabrication ease and durability to significantly reduce packaging and shipping costs that acrylic can't touch.

### Brand Names

Spectar®, Vivak®, Ultros®, Zypet®, Excelon®, Lustrofilm, Pacur 6763, Pal-G™, Kodar, Radicron

*Emco Industrial Plastics doesn't claim to represent all of the manufacturers or trade name products listed. This list is intended as a guide of typical materials available for purchase from Emco Industrial Plastics, Inc. For additional information, contact an Emco Industrial Plastics representative at (800) 292-9906.*

### Availability

TYPE	SIZE	LENGTH	COLOR
Sheet	1/8" - 1/2" TH	48" x 75", 96"; CTS	Clear
Other	PET-G Mirror		

**Give us your cut-to-size dimensions. We will precision-cut these plastics to your exact size. Additional sizes and colors available upon request.**

### Properties

PHYSICAL PROPERTIES	UNITS	ASTM	RESULTS
Density	lb/in <sup>3</sup>	D792	0.0441 - 0.0480
Water Absorption, 24 hrs	%	D570	
MECHANICAL PROPERTIES	UNITS	ASTM	RESULTS
Tensile Strength @Yield	psi	D638	4,100 - 8,500
Tensile Elongation @Break	%	D638	10.0 - 350
Flexural Strength	psi	D790	7,200 - 12,200
Flexural Modulus	psi	400000	180,000 - 339,000
Hardness, Rockwell R		D785	R105 - R110
IZOD Impact Strength Notched	ft-lb/in	D256	1.11 - 20.0
THERMAL PROPERTIES	UNITS	ASTM	RESULTS
Coefficient of Linear Thermal Expansion	µin/in-°F	D256	3.3 - 3.8
Heat Deflection Temp at 66 psi	°F	D648	140 - 160
Heat Deflection Temp at 264 psi	°F		131 - 162
Max Operating Temp	°F		150
Flammability Rating		UL94	HB
ELECTRICAL PROPERTIES	UNITS	ASTM	RESULTS
Dielectric Strength	V/mil	D149	410
Dielectric Constant @1 KHz		D150	4
Dissipation Factor @ 1 Hz		D150	0.005
OPTICAL PROPERTIES	UNITS	ASTM	RESULTS
3mm Transparent Clear Transmittance, Total (%)	%	D1003	0.300 - 1.00
Refractive Index	%		1.57

*NOTE: The property values presented above are typical values intended for reference and comparison purposes only. They should NOT be used as a basis for design specifications or quality control. Contact us for manufacturers' complete material property datasheets. All values at 73°F (23°C) unless otherwise noted.*