

TPE Product Selection Guide

PRODUCT SERIES	Standard Grade TPEs			Specialty TPEs				Overmolding TPEs		
	P1	P2	P3	C	D	F	Coating	A	N	S
FEATURES	Economy Grades Indoor Applications Disposable Articles	All Purpose Grades Easy Processing Colorable	Heat Resistance UV Resistance Abrasion Resistance	Ultra-transparent Ultra-soft	Extrusion Grades Low Compression Set High Tear Strength Low Extractable	Flame Retardant Halogen-free Available	Fabric Coating	Bonds to ABS, PC, PC/ABS, PETG, TPU	Bonds to Nylon PA6	Bonds to HIPS, GPPS, SMMA
APPLICATIONS	Sporting Goods Housewares Hand Tools Floor Mats	Personal Care Sports & Leisure Toys Handles & Grips Pet Products	Medical Devices Personal Care Automotive Consume Electronic Wearable Devices	Footwear Sporting Goods Caps & Closures Tubing & Gaskets Safety Equipment	Weather Seals Cap & Closure Hose & Tubing Floor & Cargo Liner Films	Cables & Cords Electrical Insulation Connectors Fiber Optics Grommets	Textiles Gloves Footwear	Consumer Electronics Power Tools Housewares Appliances	Power Tools Kitchenware Furniture Handes Sports Equipment	Housewares Office Supplies Personal Care
PROCESSING										
Injection Molding	✓	✓	✓	✓		✓		✓	✓	✓
Extrusion	✓		✓	✓	✓	✓	✓	✓	✓	✓
PERFORMANCE										
Hardness Range	30A to 88A	22A to 87A	8A to 99A	0A to 95A	15A to 90A	50A to 97A	55A to 75A	10A to 85A	50A to 65A	30A to 75A
Bondable Substrates	PP	PP	PP, PE	PP	PP	PP	Fabrics	ABS, PC, PC/ABS, PETG, TPU	Nylon (PA6)	HIPS, GPPS, SMMA
Density (g/cm3)	0.90 to 1.20	0.90 to 1.20	0.87 to 1.20	0.87 to 0.92	0.90 to 1.18	1.10 to 1.18	0.90 to 1.15	0.90 to 1.22	0.93 to 1.1	0.90 to 1.15
Mold Shrinkage	1.0 to 2.2%	0.8 to 2.5%	0.8 to 3.0%	0.8 to 3.0%	1.2 to 3.5%	0.8 to 2.7%	--	0.5 to 2.7%	0.7 to 2.3%	0.6 to 1.8%
Application Temperature Range	-70°C to 80°C	-60°C to 100°C	-70°C to 160°C	-70°C to 130°C	-70°C to 160°C	-70°C to 160°C	-50°C to 80°C	-50°C to 110°C	-70°C to 120°C	-50°C to 100°C
Compression Set @ Room Temperature	Low - High	Low - High	Low - High	Low - High	Low - High	Low - High	--	Low - High	Low - High	Low - High
Compression Set @ 70°C	Med. - High	Med. - High	Low - High	Med. - High	Low - Med.	Med. - High	--	Med. - High	Med. - High	Med. - High
Abrasion Resistant			✓		✓	✓		✓		
Weather Resistant		✓	✓	✓	✓	✓	✓	✓	✓	
Coefficient of Friction	Low - High	Low - High	Low - High	Med. - High	Low - High	Low - High	Low - High	Low - High	Low - High	Low - High
VISUAL										
Clear/Transparency			✓	✓			✓	✓		
Translucent		✓	✓		✓		✓	✓	✓	
Opaque	✓	✓	✓		✓	✓	✓	✓	✓	✓
OTHER										
Foamable	✓		✓	✓	✓					✓
Sterilizable			✓	✓	✓					
Oil-free	✓		✓	✓	✓					
Low Taste and Odor			✓	✓	✓	✓		✓		
FDA, EU, GB			✓	✓	✓			✓		
RoHS, REACH	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Note: ✓ indicates that the product series includes some grades that meet the performance parameters.

Intrinsic Properties of TPE

- Soft Touch
- Ergonomic Grip
- High Elasticity
- Shock Absorption
- Weather Resistance
- Non-PVC and Non-Latex

Processing Features of TPE

- Recyclable
- Colorable
- Easy Processing
- Stand-alone or Overmolded

