

PELPRENE™ E450B

Thermoplastic Polyester Elastomer

TOYOBO America, Inc.

Message:

PELPRENE™E450B is a thermoplastic polyester elastomer (TPEE) product. It is available in North America.

- Features include:
- flame retardant/rated flame
 - Copolymer
 - Good processability
 - chemical resistance
 - Heat resistance

General Information			
UL YellowCard	E51743-100288789		
Features	Copolymer		
	Workability, good		
	Good chemical resistance		
	Heat resistance, medium		
	General		
Uses	General		
Forms	Particle		
Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.28	g/cm ³	ASTM D792
Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)	10	g/10 min	ASTM D1238
Molding Shrinkage - Flow (2.00 mm)	1.7	%	ASTM D955
Water Absorption (Equilibrium, 23°C, 65% RH)	0.25	%	ASTM D570
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness (Shore D)	78		ASTM D2240
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength (Yield)	35.0	MPa	ASTM D638
Tensile Elongation (Break)	440	%	ASTM D638
Flexural Modulus	1270	MPa	ASTM D790
Compressive Modulus	39.2	MPa	ASTM D695
Taber Abrasion Resistance (1000 Cycles)	5.00	mg	ASTM D1044
Elastomers	Nominal Value	Unit	Test Method
Tensile Stress (50% Strain)	40.3	MPa	ASTM D412
Tear Strength	237	kN/m	ASTM D624
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact	39	J/m	ASTM D256
Thermal	Nominal Value	Unit	Test Method

Deflection Temperature Under Load (1.8 MPa, Unannealed)	161	°C	ASTM D648
Brittleness Temperature	-60.0	°C	ASTM D746
Vicat Softening Temperature	202	°C	ASTM D1525
Melting Temperature	222	°C	DSC
CLTE - Flow	1.4E-4	cm/cm/°C	ASTM D696
Electrical	Nominal Value	Unit	Test Method
Volume Resistivity	7.0E+15	ohms·cm	ASTM D257
Dielectric Strength	30	kV/mm	ASTM D149
Flammability	Nominal Value	Unit	Test Method
Flame Rating	HB		UL 94
Additional Information			

Hardness, JIS k6301, A scale: 9910% Compression Modulus, ASTM D695: 39.2 MPa Coefficient of Linear Thermal Expansion, TMA: 14e-5 1/K

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China

