

## BASF Polystyrol® 445 E WU Impact Grade Polystyrene (Europe)

Category : Polymer , Thermoplastic , Polystyrene (PS) , Polystyrene, Flame Retardant

### Material Notes:

Easy flowing, heat-resistant, medium-impact, flame-retardant grade. Application example: electrical distribution boxes. Data was collected by ISO methods and provided by BASF.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_BASF-Polystyrol-445-E-WU-Impact-Grade-Polystyrene-Europe.php](http://www.lookpolymers.com/polymer_BASF-Polystyrol-445-E-WU-Impact-Grade-Polystyrene-Europe.php)

Physical Properties	Metric	English	Comments
Density	1.06 g/cc	0.0383 lb/in <sup>3</sup>	
Water Absorption	0.12 %	0.12 %	
Moisture Absorption at Equilibrium	0.10 %	0.10 %	
Linear Mold Shrinkage, Flow	0.0055 cm/cm	0.0055 in/in	
Melt Flow	13 g/10 min	13 g/10 min	
	@Load 5.00 kg, Temperature 200 °C	@Load 11.0 lb, Temperature 392 °F	

Mechanical Properties	Metric	English	Comments
Tensile Strength, Yield	32.0 MPa	4640 psi	
Elongation at Break	30 %	30 %	
Elongation at Yield	1.6 %	1.6 %	
Tensile Modulus	2.45 GPa	355 ksi	
Charpy Impact Unnotched	8.00 J/cm <sup>2</sup>	38.1 ft-lb/in <sup>2</sup>	
	6.00 J/cm <sup>2</sup>	28.6 ft-lb/in <sup>2</sup>	
	@Temperature -30.0 °C	@Temperature -22.0 °F	
Charpy Impact, Notched	0.800 J/cm <sup>2</sup>	3.81 ft-lb/in <sup>2</sup>	
Tensile Creep Modulus, 1 hour	2200 MPa	319000 psi	
Tensile Creep Modulus, 1000 hours	1600 MPa	232000 psi	

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	100 µm/m-°C	55.6 µin/in-°F	
	@Temperature 20.0 °C	@Temperature 68.0 °F	

Thermal Properties	Metric	English	Comments
Deflection Temperature at 0.46 MPa (264 psi)	86.0 °C	187 °F	
Deflection Temperature at 1.8 MPa (264 psi)	78.0 °C	172 °F	
Vicat Softening Point	87.0 °C	189 °F	
Flammability, UL94	V-2 @Thickness 3.18 mm	V-2 @Thickness 0.125 in	
Oxygen Index	26 %	26 %	

Electrical Properties	Metric	English	Comments
Electrical Resistivity	>= 1.00e+15 ohm-cm	>= 1.00e+15 ohm-cm	
Surface Resistance	1.00e+13 ohm	1.00e+13 ohm	
Dielectric Constant	2.5 @Frequency 100 Hz	2.5 @Frequency 100 Hz	
	2.5 @Frequency 1e+6 Hz	2.5 @Frequency 1e+6 Hz	
Dissipation Factor	0.00050 @Frequency 1e+6 Hz	0.00050 @Frequency 1e+6 Hz	
	0.00060 @Frequency 100 Hz	0.00060 @Frequency 100 Hz	
Comparative Tracking Index	400 V	400 V	

## Contact Songhan Plastic Technology Co.,Ltd.

Website : [www.lookpolymers.com](http://www.lookpolymers.com)

Email : [sales@lookpolymers.com](mailto:sales@lookpolymers.com)

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China