

PolyOne Geon™ 83510 Polyvinyl Chloride, Rigid (PVC, Rigid)

Category : Polymer , Thermoplastic , Vinyl (PVC) , PVC, Rigid Grade

Material Notes:

Information provided by PolyOne

Order this product through the following link:

http://www.lookpolymers.com/polymer_PolyOne-Geon-83510-Polyvinyl-Chloride-Rigid-PVC-Rigid.php

Physical Properties	Metric	English	Comments
Specific Gravity	1.45 g/cc	1.45 g/cc	ASTM D792
Spiral Flow	88.9 cm	35.0 in	

Mechanical Properties	Metric	English	Comments
Hardness, Shore D	82	82	ASTM D2240
Tensile Strength, Yield	55.2 MPa	8010 psi	Type I, 5.1 mm/min; ASTM D638
Elongation at Break	4.0 %	4.0 %	Type I, 5.1 mm/min; ASTM D638
Tensile Modulus	4.83 GPa	701 ksi	Type I, 5.1 mm/min; ASTM D638
Flexural Strength	82.7 MPa	12000 psi	ASTM D790
Flexural Modulus	4.14 GPa	600 ksi	ASTM D790
Poissons Ratio	0.42	0.42	ASTM E132
Shear Modulus	1.70 GPa	247 ksi	Calculated
Izod Impact, Notched	0.530 J/cm @Thickness 3.18 mm, Temperature 23.0 °C	0.993 ft-lb/in @Thickness 0.125 in, Temperature 73.4 °F	Injection Molded; ASTM D256A
Izod Impact, Unnotched	3.70 J/cm @Thickness 3.18 mm, Temperature 23.0 °C	6.93 ft-lb/in @Thickness 0.125 in, Temperature 73.4 °F	Injection Molded; ASTM D4812

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	40.0 µm/m-°C	22.2 µin/in-°F	ASTM D696
Deflection Temperature at 1.8 MPa (264 psi)	75.0 °C @Thickness 6.35 mm	167 °F @Thickness 0.250 in	Annealed; ASTM D648
UL RTI, Electrical	50.0 °C	122 °F	UL 746
UL RTI, Mechanical with Impact	50.0 °C	122 °F	UL 746

Thermal Properties UL 94, Mechanical without Impact	Metric 500 °C	English 1200 °F	Comments UL 94
Flammability, UL94	V-0 @Thickness 1.50 mm	V-0 @Thickness 0.0591 in	ALL; UL 94
	5VA @Thickness 1.50 mm	5VA @Thickness 0.0591 in	ALL; UL 94

Processing Properties	Metric	English	Comments
Melt Temperature	199 - 210 °C	390 - 410 °F	

Descriptive Properties	Value	Comments
Features	General Purpose	
	High Flow	
Filler / Reinforcement	Glass Fiber Reinforcement, 10% Filler by Weight	
Forms	Pellets	
Generic Material	PVC, Rigid	
Generic Name	Polyvinyl Chloride, Rigid (PVC, Rigid)	
Regional Availability	Africa & Middle East	
	Asia Pacific	
	Europe	
	North America	
	South America	
Uses	Construction Applications	
	General Purpose	
	Outdoor Applications	

Contact Songhan Plastic Technology Co.,Ltd.

Website : www.lookpolymers.com

Email : sales@lookpolymers.com

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

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