

**PolyOne Geon™ Specialty Suspension Atlas E 46 Polyvinyl Chloride Homopolymer (PVC Homopolymer)**

Category : Polymer , Thermoplastic , Vinyl (PVC)

**Material Notes:**

Geon® Atlas E 46 is high molecular weight homopolymer specialty suspension resin intended for use in high strength extruded parts. It improves the physical performance of end application for instance wire and cable insulation, extruded tubes. The high porosity property of this resin allows rapid plasticizer absorption in highly plasticized compounds providing low compound cycle times and resulting in high compound throughput and low manufacturing cost. Geon® Atlas E 46 improves heat distortion (HDT) performance and increases the strength for highly plasticized formulas, and provides longer product shelf life. Note: The value set forth represent 'typical' values and PolyOne Corporation, therefore, makes no representation that the material in any particular shipment will conform to the listed properties.

**Packaging:** This resin is shipped in multi-wall paper bags, netweight 50lbs, 2,500lbs per pallet. Information shown on the package includes commercial identification number, lot, and weight. STP 488 (formulation): 100phr Geon® Atlas E 46, 55phr TOTM, and 18phr Filler ASTM D638 (formulation): 100phr Geon® Atlas E 46, 60phr DINP, 5phr ESO, and 2phr Mark 4716 Information provided by PolyOne

Order this product through the following link:  
[http://www.lookpolymers.com/polymer\\_PolyOne-Geon-Specialty-Suspension-Atlas-E-46-Polyvinyl-Chloride-Homopolymer-PVC-Homopolymer.php](http://www.lookpolymers.com/polymer_PolyOne-Geon-Specialty-Suspension-Atlas-E-46-Polyvinyl-Chloride-Homopolymer-PVC-Homopolymer.php)

Physical Properties	Metric	English	Comments
Specific Gravity	1.40 g/cc	1.40 g/cc	ASTM D792
Volatiles	0.070 %	0.070 %	Geon® STP 793; Internal Method
Apparent Bulk Density	0.420 g/cc	0.0152 lb/in³	Geon® STP 1169; Internal Method
Porosity	0.55 %	0.55 %	cm³/g; Geon® STP 1094; Internal Method
Particle Size	<= 105 µm	<= 105 µm	6.9%; Geon® DFT 1466; Internal Method
	150 µm	150 µm	Average Particle SizeGeon® DFT 1466; Internal Method
	>= 250 µm	>= 250 µm	2.5%; Geon® DFT 1466; Internal Method
Relative Viscosity	3.55 cP	3.55 cP	Correlation, Cyclohexanone 1%; Internal Method
Viscosity Measurement	1.6	1.6	Inherent; ASTM D1243-60-A

Mechanical Properties	Metric	English	Comments
Tensile Strength	18.6 MPa	2700 psi	Optimum; With provided formulation; ASTM D638

Descriptive Properties	Value	Comments
	0	Internal Method; Magnetic ParticlesGeon® STP 1217 Unit:

Contamination Descriptive Properties	Value	#/100in <sup>2</sup> Comments
	1	Internal Method; Dark ParticlesGeon® STP 1217 Unit: #/100in <sup>2</sup>
	4	Internal Method; Light Colored ParticlesGeon® STP 1217 Unit: #/100in <sup>2</sup>
Features	High Strength	
Flow Time	25 sec	Internal Method; Conditioned Funnel Flow TimeGeon® STP 1169
Forms	Powder	White powder
Generic Material	PVC Homopolymer	
Generic Name	Polyvinyl Chloride Homopolymer (PVC Homopolymer)	
K-Value	87	Internal Method; Correlation, 0.5g/100ml
Polymerization Process	Suspension	
Powder Mix Time	3.6 min	Internal Method; Geon® STP 488 (with provided formulation)
Processing Method	Extrusion	
Regional Availability	Africa & Middle East	
	Asia Pacific	
	Europe	
	North America	
	South America	
Residual Vinyl Chloride Monomer	< 1 ppm	Internal Method; Geon® STP 1005
Uses	Tubing	
	Wire & Cable Applications	

## 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