

## PolyOne Geon™ Specialty Suspension Atlas S140 Polyvinyl Chloride Homopolymer (PVC Homopolymer)

Category: Polymer, Thermoplastic, Vinyl (PVC)

## **Material Notes:**

Geon® Atlas S140 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 intsance wire and cable insulation, extruded tubes. The high porosity property of this resin allows rapid plasticizer absorption reducing the compound cycle times and resulting in high compound throughput and low manufacturing cost. Geon® Atlas S140 improves heat distortion (HDT) performance, increase 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 multiwall 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 S140, 55phr TOTM, and 18phr Filler ASTM D638 (formulation): 100phr Geon® Atlas S140, 60phr DINP, 5phr ESO, and 2phr Mark 4716Information provided by PolyOne

Order this product through the following link:

http://www.lookpolymers.com/polymer\_PolyOne-Geon-Specialty-Suspension-Atlas-S140-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	0.410 g/cc	0.0148 lb/in³	Geon® STP 1169; Internal Method
Porosity	0.57 %	0.57 %	cm³/g; Geon® STP 1094; Internal Method
Particle Size	<= 105 μm	<= 105 μm	14.8%; Geon® DFT 1466; Internal Method
	145 µm	145 µm	Average Particle SizeGeon® DFT 1466; Internal Method
	>= 250 μm	>= 250 μm	3.4%; Geon® DFT 1466; Internal Method
Relative Viscosity	3.1 cP	3.1 cP	Correlation, Cyclohexanone 1%; Internal Method
Viscosity Measurement	1.4	1.4	Inherent; ASTM D1243-60-A

Mechanical Properties	Metric	English	Comments
Tensile Strength	17.9 MPa	2600 psi	Optimum; With provided formulation; ASTM D638

Descriptive Properties Value Comments	
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Descriptive Properties	Value	Comments
	1	Internal Method; Dark ParticlesGeon® STP 1217 Unit: #/100in2
	4	Internal Method; Light Colored ParticlesGeon® STP 1217 Unit: #/100in2
Features	High Strength	
Flow Time	27 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	82	Internal Method; Correlation, 0.5g/100ml
Polymerization Process	Suspension	
Powder Mix Time	2.6 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	Insulation	
	Wire & Cable Applications	

## **Contact Songhan Plastic Technology Co.,Ltd.**

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