

## Overview of materials for PVC, High Impact

Category : Polymer , Thermoplastic , Vinyl (PVC) , PVC, High Impact

### Material Notes:

This property data is a summary of similar materials in the MatWeb database for the category "PVC, High Impact". Each property range of values reported is minimum and maximum values of appropriate MatWeb entries. The comments report the average value, and number of data points used to calculate the average. The values are not necessarily typical of any specific grade, especially less common values and those that can be most affected by additives or processing methods.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Overview-of-materials-for-PVC-High-Impact.php](http://www.lookpolymers.com/polymer_Overview-of-materials-for-PVC-High-Impact.php)

Physical Properties	Metric	English	Comments
Density	0.801 - 1.52 g/cc	0.0289 - 0.0549 lb/in <sup>3</sup>	Average value: 1.30 g/cc Grade Count:53
Water Absorption	0.200 - 3.00 %	0.200 - 3.00 %	Average value: 2.07 % Grade Count:3
Linear Mold Shrinkage	0.00200 - 0.00500 cm/cm	0.00200 - 0.00500 in/in	Average value: 0.00350 cm/cm Grade Count:8
Spiral Flow	58.4 - 61.0 cm	23.0 - 24.0 in	Average value: 59.1 cm Grade Count:4

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell R	100 - 107	100 - 107	Average value: 103 Grade Count:4
Hardness, Shore D	76.0 - 84.0	76.0 - 84.0	Average value: 80.6 Grade Count:38
Tensile Strength, Ultimate	30.0 - 44.9 MPa	4350 - 6510 psi	Average value: 41.3 MPa Grade Count:11
Tensile Strength, Yield	37.9 - 53.4 MPa	5500 - 7750 psi	Average value: 45.0 MPa Grade Count:41
Elongation at Break	26.0 - 110 %	26.0 - 110 %	Average value: 49.2 % Grade Count:10
Elongation at Yield	3.10 - 10.0 %	3.10 - 10.0 %	Average value: 5.78 % Grade Count:4
Modulus of Elasticity	2.03 - 3.30 GPa	294 - 479 ksi	Average value: 2.64 GPa Grade Count:50
Flexural Yield Strength	65.8 - 92.4 MPa	9540 - 13400 psi	Average value: 78.9 MPa Grade Count:46
Flexural Modulus	2.05 - 3.21 GPa	297 - 466 ksi	Average value: 2.66 GPa Grade Count:47
Izod Impact, Notched	0.600 - 13.9 J/cm	1.12 - 26.0 ft-lb/in	Average value: 8.93 J/cm Grade Count:44
	1.07 - 11.7 J/cm	2.00 - 21.9 ft-lb/in	Average value: 4.00 J/cm Grade Count:7
	@Temperature -40.0 -	@Temperature -40.0 -	

Mechanical Properties	10.0 °C Metric	50.0 °F English	Comments
	1.07 - 11.7 J/cm  @Thickness 3.18 - 3.18 mm	2.00 - 21.9 ft-lb/in  @Thickness 0.125 - 0.125 in	Average value: 4.00 J/cm Grade Count:7
Dart Drop Total Energy	44.5 - 280 J/cm	0.0834 - 0.525 ft-lb/mil	Average value: 119 J/cm Grade Count:22
	40.0 - 66.7 J/cm  @Temperature 0.000 - 0.000 °C	0.0749 - 0.125 ft-lb/mil  @Temperature 32.0 - 32.0 °F	Average value: 50.4 J/cm Grade Count:3

Thermal Properties	Metric	English	Comments
CTE, linear	50.0 - 140 µm/m-°C	27.8 - 77.8 µin/in-°F	Average value: 71.1 µm/m-°C Grade Count:25
Deflection Temperature at 0.46 MPa (66 psi)	64.4 - 93.9 °C	148 - 201 °F	Average value: 79.6 °C Grade Count:12
Deflection Temperature at 1.8 MPa (264 psi)	59.4 - 87.8 °C	139 - 190 °F	Average value: 71.9 °C Grade Count:45
Vicat Softening Point	78.0 - 81.0 °C	172 - 178 °F	Average value: 80.0 °C Grade Count:3
Flammability, UL94	V-0 - 5VA	V-0 - 5VA	Grade Count:11
Oxygen Index	30.0 %	30.0 %	Average value: 30.0 % Grade Count:3

Optical Properties	Metric	English	Comments
Transmission, Visible	7.50 - 90.0 %	7.50 - 90.0 %	Average value: 69.6 % Grade Count:6

Processing Properties	Metric	English	Comments
Processing Temperature	196 - 213 °C	385 - 415 °F	Average value: 205 °C Grade Count:5
Melt Temperature	174 - 210 °C	345 - 410 °F	Average value: 196 °C Grade Count:29

## 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