

Overview of materials for Styrenic TPE (Unverified Data**)

Category : Polymer , Thermoplastic , Elastomer, TPE , Styrenic TPE

Material Notes:

This property data is a summary of similar materials in the MatWeb database for the category "Styrenic TPE". 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-Styrenic-TPE-nbspUnverified-Data.php

| Physical Properties | Metric | English | Comments |
|-----------------------|----------------------|------------------------------------|---|
| Density | 0.930 - 1.68 g/cc | 0.0336 - 0.0607 lb/in ³ | Average value: 1.06 g/cc Grade Count:35 |
| Water Absorption | 0.050 % | 0.050 % | Average value: 0.0500 % Grade Count:10 |
| Viscosity | 22.8 - 4500 cP | 22.8 - 4500 cP | Average value: 1590 cP Grade Count:4 |
| Viscosity Measure | 8.2 - 25 cSt | 8.2 - 25 cSt | Average value: 17.4 cSt Grade Count:16 |
| Linear Mold Shrinkage | 0.0060 - 0.025 cm/cm | 0.0060 - 0.025 in/in | Average value: 0.0182 cm/cm Grade Count:13 |
| Melt Flow | 1.0 - 84 g/10 min | 1.0 - 84 g/10 min | Average value: 26.2 g/10 min Grade Count:27 |

| Mechanical Properties | Metric | English | Comments |
|----------------------------|---------------------|------------------|---|
| Hardness, Shore A | 45 - 91 | 45 - 91 | Average value: 66.6 Grade Count:40 |
| Tensile Strength, Ultimate | 0.345 - 80.0 MPa | 50.0 - 11600 psi | Average value: 11.6 MPa Grade Count:42 |
| Tensile Strength, Yield | 3.80 - 5.00 MPa | 551 - 725 psi | Average value: 4.28 MPa Grade Count:9 |
| Elongation at Break | 3.8 - 900 % | 3.8 - 900 % | Average value: 495 % Grade Count:42 |
| Modulus of Elasticity | 0.0180 - 0.0680 GPa | 2.61 - 9.86 ksi | Average value: 0.0313 GPa Grade Count:8 |
| Flex Crack Resistance | 35000 - 132000 | 35000 - 132000 | Average value: 79400 Grade Count:4 |
| Tear Strength | 20.0 - 29.4 kN/m | 114 - 168 pli | Average value: 24.9 kN/m Grade Count:9 |

| Thermal Properties | Metric | English | Comments |
|-------------------------|------------------|------------------|---------------------------------------|
| Brittleness Temperature | -60.0 - -57.0 °C | -76.0 - -70.6 °F | Average value: -59.0 °C Grade Count:4 |

| Thermal Properties | Metric | English | Comments |
|--------------------|-----------|-----------|-------------------------------------|
| Flammability, UL94 | HE - V-0 | HE - V-0 | Grade Count:5 |
| Oxygen Index | 26 - 29 % | 26 - 29 % | Average value: 28.0 % Grade Count:4 |

| Electrical Properties | Metric | English | Comments |
|------------------------|-------------------------|-------------------------|--|
| Electrical Resistivity | 0.100 - 1.00e+16 ohm-cm | 0.100 - 1.00e+16 ohm-cm | Average value: 7.69e+15 ohm-cm Grade Count:13 |

| Chemical Properties | Metric | English | Comments |
|---------------------|-----------|-----------|--------------------------------------|
| Butadiene Content | 60 - 78 % | 60 - 78 % | Average value: 70.2 % Grade Count:10 |

| Processing Properties | Metric | English | Comments |
|------------------------|-----------------|-----------------|---|
| Processing Temperature | 171 - 199 °C | 340 - 390 °F | Average value: 185 °C Grade Count:13 |
| Nozzle Temperature | 188 - 210 °C | 370 - 410 °F | Average value: 199 °C Grade Count:4 |
| Die Temperature | 190 - 210 °C | 374 - 410 °F | Average value: 200 °C Grade Count:4 |
| Melt Temperature | 166 - 210 °C | 330 - 410 °F | Average value: 188 °C Grade Count:4 |
| Mold Temperature | 15.6 - 65.6 °C | 60.0 - 150 °F | Average value: 31.0 °C Grade Count:17 |
| Injection Pressure | 1.38 - 103 MPa | 200 - 15000 psi | Average value: 66.9 MPa Grade Count:17 |
| Cushion | 0.381 - 2.54 cm | 0.150 - 1.00 in | Average value: 1.46 cm Grade Count:4 |

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