

PRODUCT DESCRIPTION

A soft , black SEBS based thermoplastic elastomer (TPE) compound designed for use in medical applications.

GENERAL PROPERTIES

| | |
|--------------------------|---|
| Material Status | Active |
| Availability | Europe North America Asia- Pasific Africa & Middle East |
| Features | Ozone Resistance Adhesion to Polyolefins Recyclable Compliant with RoHS Directive 2011/65/EU Compliant with USP Class VI Requirements |
| Certification | RoHS |
| Appearance | Black |
| Form | Pellets |
| Processing Method | Injection, Extrusion |

Physical Properties

| Property | Typical Value (English) | Typical Value (SI) | Test Method |
|-------------------------------------|-------------------------|------------------------|------------------------------|
| Density | 0.89 g/cm ³ | 0,89 g/cm ³ | ASTM D 792 |
| Durometer Hardness, 3 sec (Shore A) | 80.00 | 80,00 | ASTM D 2240 |
| Tensile Strength at Break | 1740 Psi | 12,00 MPa | ASTM D412, Method A |
| Mod.of Elasticity %100 | 537 Psi | 3,70 MPa | ASTM D412, Method A |
| Mod.of Elasticity %300 | 812 Psi | 5,60 MPa | ASTM D412, Method A |
| Elongation at break | 900.00 % | 900,00 % | ASTM D412, Method A |
| Compression Set (at 73 °F, 22 h) | 26.00 % | 26,00 % | ASTM D 395, Type 2, Method B |
| Compression Set (at 158 °F, 22 h) | 46.00 % | 46,00 % | ASTM D 395, Type 2, Method B |
| Compression Set (at 212 °F, 22 h) | 70.00 % | 70,00 % | ASTM D 395, Type 2, Method B |
| Tear Resistance | 342.61 lbf/in | 60,00 N/mm | ASTM D624 |

Shrinkage

| Property | Typical Value (English) | Typical Value (SI) | Test Method |
|-------------|-------------------------|--------------------|-------------|
| Flow | 2.33% | 2.33% | ASTM D955 |
| Across Flow | 1.17% | 1.17% | ASTM D955 |

Ageing Tests

| Additional Information | Typical Value (English) | Typical Value (SI) | Test Method |
|---------------------------|-------------------------|--------------------|-------------|
| Ozone Resistance-Stressed | No cracks | No cracks | ASTM D 1149 |

Bondable to

PE-PP-EVA

Additional Information

Elastron products are not compatible with PVC and Acetal.
Regrinding level up to %20 is recommended with minimum property loss.

Processing

| Injection Molding | Typical Value (English) | | Typical Value (SI) | |
|-----------------------|-------------------------|-------|--------------------|-------|
| Drying temperatures | - | °F | - | °C |
| Drying time | No need | hours | No need | hours |
| Rear Zone temp. | 293-347 | °F | 145- 175 | °C |
| Middle Zone temp. | 311-365 | °F | 155- 185 | °C |
| Front Zone temp. | 320-374 | °F | 160- 190 | °C |
| Nozzle Temperature | 347-401 | °F | 175- 205 | °C |
| Injection Speed | Low/ Mod | - | Low/ Mod | - |
| Injection Time | 3- 5 | sec. | 3- 5 | sec. |
| Injection Pressure | 10- 40 | bar | 10- 40 | bar |
| Hold Pressure | 5- 20 | bar | 5- 20 | bar |
| Back Pressure | 5- 40 | bar | 5- 40 | bar |
| Screw Speed | 50- 200 | rpm | 50- 200 | rpm |
| Mold Temperature | 77-122 | °F | 25- 50 | °C |
| Screw Comp. ratio | 1.5:1- 2.0:1 | - | 1.5:1- 2.0:1 | - |
| Screw L/D ratio | 18- 24 | - | 18- 24 | - |
| Residence time | 1- 2 shot | - | 1- 2 shot | - |
| Cushion size | 0.3120 | inc | 8 | mm |
| Suggested Max Regrind | 20 | % | 20 | % |

| Extrusion Molding | Typical Value (English) | | Typical Value (SI) | |
|-----------------------|-------------------------|-------|--------------------|-------|
| Drying temperatures | - | °F | - | °C |
| Drying time | No need | hours | No need | hours |
| Screw Comp. Ratio | 1.5:1- 2.0:1 | - | 1.5:1- 2.0:1 | - |
| Screw L/D | 18- 30 | - | 18- 30 | - |
| Feed Zone temp. | 302-338 | °F | 150- 170 | °C |
| Rear Zone temp. | 311-347 | °F | 155- 175 | °C |
| Center Zone temp. | 329-365 | °F | 165- 185 | °C |
| Front Zone temp. | 347-401 | °F | 175- 205 | °C |
| Head temp. | 356-410 | °F | 180- 210 | °C |
| Die temp. | 374-410 | °F | 190- 210 | °C |
| Suggested Max Regrind | 20 | % | 20 | % |

Notes

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ISO 9001: 2015 & IATF16949: 2016 & ISO 14001: 2015 REGISTERED QUALITY SYSTEMS

