

PRODUCT DESCRIPTION

A soft , black SEBS based thermoplastic elastomer (TPE) compound that offers high temperature resistance and excellent compression set with superior UV resistance.

GENERAL PROPERTIES

|                          |   |
|--------------------------|---|
| <b>Material Status</b>   | Active  |
| <b>Availability</b>      | Europe<br>North America<br>Asia- Pasific<br>Africa & Middle East  |
| <b>Features</b>          | Designed for Applications Require High Temperature Resistance<br>Excellent UV Resistance<br>Excellent Compression Set<br>Ozone Resistance<br>Compliant with RoHS Directive 2011/65/EU |
| <b>Certification</b>     | RoHS  |
| <b>Appearance</b>        | Black   |
| <b>Form</b>              | Pellets   |
| <b>Processing Method</b> | Injection, Extrusion  |

Physical Properties

| Property                            | Typical Value (English) | Typical Value (SI)     | Test Method                  |
|-------------------------------------|-------------------------|------------------------|------------------------------|
| Density                             | 1.20 g/cm <sup>3</sup>  | 1,20 g/cm <sup>3</sup> | ASTM D 792                   |
| Durometer Hardness, 3 sec (Shore A) | 67.00                   | 67,00                  | ASTM D 2240                  |
| Tensile Strength at Break           | 1015 Psi                | 7,00 MPa               | ASTM D412, Method A          |
| Mod.of Elasticity %100              | 348 Psi                 | 2,40 MPa               | ASTM D412, Method A          |
| Mod.of Elasticity %300              | 667 Psi                 | 4,60 MPa               | ASTM D412, Method A          |
| Elongation at break                 | 750.00 %                | 750,00 %               | ASTM D412, Method A          |
| Compression Set (at 73 °F, 22 h)    | 15.00 %                 | 15,00 %                | ASTM D 395, Type 2, Method B |
| Compression Set (at 158 °F, 22 h)   | 29.00 %                 | 29,00 %                | ASTM D 395, Type 2, Method B |
| Compression Set (at 212 °F, 22 h)   | 54.00 %                 | 54,00 %                | ASTM D 395, Type 2, Method B |
| Tear Resistance                     | 205.56 lbf/in           | 36,00 N/mm             | ASTM D624                    |

Shrinkage

| Property    | Typical Value (English) | Typical Value (SI) | Test Method |
|-------------|-------------------------|--------------------|-------------|
| Flow        | 2.00%                   | 2.00%              | ASTM D955   |
| Across Flow | 1.05%                   | 1.05%              | 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.

| Injection Molding     | Typical Value (English) |       | Typical Value (SI) |       |
|-----------------------|-------------------------|-------|--------------------|-------|
| Drying temperatures   | 194                     | °F    | 90                 | °C    |
| Drying time           | 2                       | hours | 2                  | hours |
| Rear Zone temp.       | 320-374                 | °F    | 160- 190           | °C    |
| Middle Zone temp.     | 338-392                 | °F    | 170- 200           | °C    |
| Front Zone temp.      | 347-401                 | °F    | 175- 205           | °C    |
| Nozzle Temperature    | 374-428                 | °F    | 190- 220           | °C    |
| Injection Speed       | Mod/ High               | -     | Mod/ High          | -     |
| Injection Time        | 1- 3                    | sec.  | 1- 3               | 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- 3.0:1            | -     | 1.5:1- 3.0:1       | -     |
| 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   | 194                     | °F    | 90                 | °C    |
| Drying time           | 2                       | hours | 2                  | hours |
| Screw Comp. Ratio     | 1.5:1- 3.0:1            | -     | 1.5:1- 3.0:1       | -     |
| Screw L/D             | 18- 30                  | -     | 18- 30             | -     |
| Feed Zone temp.       | 329-365                 | °F    | 165- 185           | °C    |
| Rear Zone temp.       | 338-374                 | °F    | 170- 190           | °C    |
| Center Zone temp.     | 356-392                 | °F    | 180- 200           | °C    |
| Front Zone temp.      | 374-428                 | °F    | 190- 220           | °C    |
| Head temp.            | 383-437                 | °F    | 195- 225           | °C    |
| Die temp.             | 401-437                 | °F    | 205- 225           | °C    |
| Suggested Max Regrind | 20                      | %     | 20                 | %     |

Notes

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

