ENGI-
NEERING
LIFE

elastron
ENGINEERING LIFE

# F.G100.A60.N

## PRODUCT DESCRIPTION

A soft , colorable SEBS based thermoplastic elastomer (TPE) compound designed for contact with non-fatty foods. The monomers and additives used to produce this product are listed in the Union List of Authorized Substances of Regulation 10/2011/EC and meets the FDA requirements contained in the Code of Federal Regulations, 21 CFR.

## GENERAL PROPERTIES

| | |
|---|---|
| **Material Status** | Active |
| **Availability** | Europe<br>North America<br>Asia- Pasific<br>Africa & Middle East |
| **Features** | Ozone Resistance<br>Adhesion to Polyolefins<br>Recyclable<br>Compliant with RoHS Directive 2011/65/EU<br>can be used in food contact applications in USA, use limitations may apply |
| **Certification** | RoHS |
| **Appearance** | Natural |
| **Form** | Pellets |
| **Processing Method** | Injection |

## Physical Properties

| Property | Typical Value (English) | Typical Value (SI) | Test Method |
|---|---|---|---|
| **Density** | 1.17 g/cm³ | 1,17 g/cm³ | ASTM D 792 |
| **Durometer Hardness, 3 sec (Shore A)** | 60.00 | 60,00 | ASTM D 2240 |
| **Tensile Strength at Break** | 725 Psi | 5,00 MPa | ASTM D412, Method A |
| **Mod.of Elasticity %100** | 276 Psi | 1,90 MPa | ASTM D412, Method A |
| **Mod.of Elasticity %300** | 406 Psi | 2,80 MPa | ASTM D412, Method A |
| **Elongation at break** | 800.00 % | 800,00 % | ASTM D412, Method A |
| **Compression Set (at 73 °F, 22 h)** | 17.00 % | 17,00 % | ASTM D 395, Type 2, Method B |
| **Compression Set (at 158 °F, 22 h)** | 51.00 % | 51,00 % | ASTM D 395, Type 2, Method B |
| **Compression Set (at 212 °F, 22 h)** | 75.00 % | 75,00 % | ASTM D 395, Type 2, Method B |
| **Tear Resistance** | 171.30 lbf/in | 30,00 N/mm | ASTM D624 |

## Shrinkage

| Property | Typical Value (English) | Typical Value (SI) | Test Method |
|---|---|---|---|
| **Flow** | 1.83% | 1.83% | ASTM D955 |
| **Across Flow** | 1.12% | 1.12% | ASTM D955 |

## Flammability

| Property | Typical Value (English) | Typical Value (SI) | Test Method |
|---|---|---|---|
| **Flammability Rating** | HB | HB | UL 94 |

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## 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 | % |

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## Notes



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