

**Elastron**

F.G400.A50.B

**TECHNICAL DATASHEET**

**PRODUCT DESCRIPTION**

A soft , black 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**

|                            |           |
|----------------------------|-----------|
| <b>Color</b>               | Black     |
| <b>Certifications</b>      | RoHS      |
| <b>Processing Method</b>   | Injection |
| <b>Available Standards</b> | ASTM      |

**Physical Properties**

| Property                  | Unit              | Standard                     | Value  |
|---------------------------|-------------------|------------------------------|--------|
| Density                   | g/cm <sup>3</sup> | ASTM D 792                   | 0.88   |
| Durometer Hardness, 3 sec | Shore A           | ASTM D 2240                  | 50.00  |
| Tensile Strength at Break | MPa               | ASTM D412, Method A          | 5.50   |
| Mod.of Elasticity %100    | MPa               | ASTM D412, Method A          | 1.40   |
| Mod.of Elasticity %300    | MPa               | ASTM D412, Method A          | 2.30   |
| Elongation at break       | %                 | ASTM D412, Method A          | 950.00 |
| Compression Set           | % at 23°C, 22 h   | ASTM D 395, Type 2, Method B | 16.00  |
| Compression Set           | % at 70°C, 22 h   | ASTM D 395, Type 2, Method B | 39.00  |
| Compression Set           | % at 100°C, 22 h  | ASTM D 395, Type 2, Method B | 64.00  |
| Tear Resistance           | N/mm              | ASTM D624                    | 27.00  |

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## Ageing Tests

| Property         | Unit     | Standard    | Value     |
|------------------|----------|-------------|-----------|
| Ozone Resistance | Stressed | ASTM D 1149 | No cracks |

## Bondable to

PE-PP-EVA

## Processing

| Injection             | Unit  | Value        |
|-----------------------|-------|--------------|
| Drying temperatures   | °C    | -            |
| Drying time           | hours | No need      |
| Rear Zone temp.       | °C    | 145- 175     |
| Middle Zone temp.     | °C    | 155- 185     |
| Front Zone temp.      | °C    | 160- 190     |
| Nozzle Temperature    | °C    | 175- 205     |
| Injection Speed       | -     | Low/ Mod     |
| Injection Time        | sec.  | 3- 5         |
| Injection Pressure    | bar   | 10- 40       |
| Hold Pressure         | bar   | 5- 20        |
| Back Pressure         | bar   | 5- 40        |
| Screw Speed           | rpm   | 50- 200      |
| Mold Temperature      | °C    | 25- 50       |
| Screw Comp. ratio     | -     | 1.5:1- 2.0:1 |
| Screw L/D ratio       | -     | 18- 24       |
| Residence time        | -     | 1-2 shot     |
| Cushion size          | mm    | 8            |
| Suggested Max Regrind | %     | 20           |

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### Additional Information

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

| Shrinkage   | Unit | Standard  | Value |
|-------------|------|-----------|-------|
| Flow        | %    | ASTM D955 | 2.50  |
| Across Flow | %    | ASTM D955 | 1.55  |

### Notes

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

