

# Elastron

P.G400.A65.N

## TECHNICAL DATASHEET

### PRODUCT DESCRIPTION

A soft , colorable SEBS based thermoplastic elastomer (TPE) compound designed for use in medical applications. This grade is capable of sterilization with steam at 134°C, Gamma (25KGy/50KGy) and EtO.

### GENERAL PROPERTIES

|                                |                         |
|--------------------------------|-------------------------|
| <b>Color</b>                   | Natural                 |
| <b>Certifications</b>          | RoHS                    |
| <b>Processing Method</b>       | Injection               |
| <b>Available Standards</b>     | ASTM                    |
| <b>USP Class VI Compliance</b> | USP Class VI Compliance |

### Physical Properties

| Property                  | Unit              | Standard                     | Value  |
|---------------------------|-------------------|------------------------------|--------|
| Density                   | g/cm <sup>3</sup> | ASTM D 792                   | 0.89   |
| Durometer Hardness, 3 sec | Shore A           | ASTM D 2240                  | 65.00  |
| Tensile Strength at Break | MPa               | ASTM D412, Method A          | 10.00  |
| Mod.of Elasticity %100    | MPa               | ASTM D412, Method A          | 1.80   |
| Mod.of Elasticity %300    | MPa               | ASTM D412, Method A          | 3.00   |
| Elongation at break       | %                 | ASTM D412, Method A          | 950.00 |
| Compression Set           | % at 23°C, 22 h   | ASTM D 395, Type 2, Method B | 20.00  |
| Compression Set           | % at 70°C, 22 h   | ASTM D 395, Type 2, Method B | 44.00  |
| Compression Set           | % at 100°C, 22 h  | ASTM D 395, Type 2, Method B | 66.00  |
| Tear Resistance           | N/mm              | ASTM D624                    | 41.00  |

## Elastron

P.G400.A65.N

| 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           |
| Drying time           | hours | -            |
| Screw Comp. Ratio     | -     | -            |
| Screw L/D             | -     | -            |
| Feed Zone temp.       | °C    | -            |
| Rear Zone temp.       | °C    | -            |
| Center Zone temp.     | °C    | -            |
| Front Zone temp.      | °C    | -            |
| Head temp.            | °C    | -            |
| Die temp.             | °C    | -            |
| Suggested Max Regrind | %     | -            |

## Elastron

P.G400.A65.N

### 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 | 1.75  |
| Across Flow | %    | ASTM D955 | 1.43  |

### Notes

The company name, the brand, the logo and all kinds of visuals and writings in this document are the property of Elastron. It cannot be copied, distributed, modified or reproduced without the express written permission of Elastron. Independently, these documents can only be printed for personal use. However, in any case, the visuals and writings contained here cannot be used in another document or web page.

All the visuals, texts, information and explanations and the like in this document are for promotional purposes, giving information and providing convenience to the user. The values presented in this document apply only to the product mentioned above and cannot be extended to other products in general. Elastron is not responsible for the results that may arise from tests outside the control of Elastron. Although Elastron bases the information and suggestions contained herein on reliable data, it does not guarantee that such information and suggestions are correct and that the product is suitable for its intended use.

The user should know that Elastron must obtain the final information before taking any action by referring to the information and suggestions contained in this document.

Elastron reserves the right, at its discretion, to change or terminate the content of the document at any time and in any way.

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

