

## V201.A70.N

#### PRODUCT DESCRIPTION

A soft , colorable thermoplastic vulcanizate, TPV (EPDM/PP) in the thermoplastic elastomer (TPE) family which offers higher temperature resistance and good compression set with good UV resistance

| GENERAL PROPERTIES |   |  |  |
|--------------------|---|--|--|
| Material Status    | Active  |  |  |
| Availability       | Europe<br>North America<br>Asia- Pasific<br>Africa & Middle East  |  |  |
| Features           | Designed for Higher Heat Resistance<br>Excellent Compression Set<br>Ozone Resistance<br>Adhesion to Polyolefins<br>Recyclable<br>Compliant with RoHS Directive 2011/65/EU |  |  |
| Certification      | RoHS  |  |  |
| Appearance         | Natural   |  |  |
| Form               | Pellets   |  |  |
| Processing Method  | Injection,Extrusion   |  |  |

| Physical Properties                 |                                       |                        |                              |  |
|-------------------------------------|---------------------------------------|------------------------|------------------------------|--|
| Property                            | Typical Value (English)               | Typical Value (SI)     | Test Method<br>ASTM D 792    |  |
| Density                             | 0.97 g/cm³                            | 0,97 g/cm <sup>3</sup> |                              |  |
| Durometer Hardness, 3 sec (Shore A) | 70.00                                 | 70,00                  | ASTM D 2240                  |  |
| Tensile Strength at Break           | at Break 943 Psi                      |                        | ASTM D412, Method A          |  |
| Mod.of Elasticity %100              | sticity %100 348 Psi                  |                        | ASTM D412, Method A          |  |
| Mod.of Elasticity %300              | 551 Psi                               | 3,80 MPa               | ASTM D412, Method A          |  |
| Elongation at break                 | 550.00 %                              | 550,00 %               | ASTM D412, Method A          |  |
| Compression Set (at 73 °F, 22 h)    | 18.00 %                               | 18,00 %                | ASTM D 395, Type 2, Method B |  |
| Compression Set (at 158 °F, 22 h)   | ression Set (at 158 °F, 22 h) 33.00 % |                        | ASTM D 395, Type 2, Method B |  |
| Compression Set (at 212 °F, 22 h)   | 40.00 %                               | 40,00 %                | ASTM D 395, Type 2, Method B |  |
| ear Resistance 148.46 lbf/in        |                                       | 26,00 N/mm             | ASTM D624                    |  |
|                                     |                                       |                        |                              |  |

| Shrinkage     |                         |                    |             |  |  |
|---------------|-------------------------|--------------------|-------------|--|--|
| Property      | Typical Value (English) | Typical Value (SI) | Test Method |  |  |
| Flow 2.00%    |                         | 2.00%              | ASTM D955   |  |  |
| Across Flow   | 1.30%                   | 1.30%              | ASTM D955   |  |  |
| ELS.FR.C01.07 | ·                       | Rev.00002          | Page 1 / 3  |  |  |



## elast n ENGINEERING LIFE

# V201.A70.N

| Typical Value (English) |                    |             |  |  |  |
|-------------------------|--------------------|-------------|--|--|--|
| Typical Value (English) | Typical Value (SI) | Test Method |  |  |  |
| No cracks               | No cracks          | ASTM D 1149 |  |  |  |
| Bondable to             |                    |             |  |  |  |
| PE-PP-EVA               |                    |             |  |  |  |
|                         | Bondable to        | Bondable to |  |  |  |

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.       | 311-347                 | °F    | 155- 175           | °C    |
| Middle Zone temp.     | 329-365                 | °F    | 165- 185           | °C    |
| Front Zone temp.      | 338-374                 | °F    | 170- 190           | °C    |
| Nozzle Temperature    | 356-410                 | °F    | 180- 210           | °C    |
| njection Speed        | High                    | -     | High               | -     |
| njection Time         | 1- 3                    | sec.  | 1-3                | sec.  |
| njection 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     | 2.0:1- 4.0:1            | -     | 2.0:1- 4.0:1       | -     |
| 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) Typi |       | Typical Value (SI) |            |
|-----------------------|------------------------------|-------|--------------------|------------|
| Drying temperatures   | 194                          | °F    | 90                 | °C         |
| Drying time           | 2                            | hours | 2                  | hours      |
| Screw Comp. Ratio     | 2.0:1- 4.0:1                 | -     | 2.0:1- 4.0:1       | -          |
| Screw L/D             | 18- 30                       | -     | 18- 30             | -          |
| Feed Zone temp.       | 311-329                      | °F    | 155- 165           | °C         |
| Rear Zone temp.       | 320-356                      | °F    | 160- 180           | °C         |
| Center Zone temp.     | 329-365                      | °F    | 165- 185           | °C         |
| Front Zone temp.      | 338-374                      | °F    | 170- 190           | °C         |
| Head temp.            | 356-410                      | °F    | 180- 210           | °C         |
| Die temp.             | 365-419                      | °F    | 185- 215           | °C         |
| Suggested Max Regrind | 20                           | %     | 20                 | %          |
| ELS.FR.C01.07         |                              |       | Rev.00002          | Page 2 / 3 |



## V201.A70.N

Page 3/3

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ELS.FR.C01.07