

Elastron

V601.A80.N

TECHNICAL DATASHEET

PRODUCT DESCRIPTION

A soft , colorable copper stabilised halogen free flame retardant (HFFR) thermoplastic vulcanizate, TPV (EPDM/PP) with good UV – Ozone resistance

GENERAL PROPERTIES

| | | |
|---------------------|-----------|-----------|
| Color | Natural | |
| Certifications | RoHS | |
| Processing Method | Injection | Extrusion |
| Available Standards | ASTM | |

Physical Properties

| Property | Unit | Standard | Value |
|---------------------------|-------------------|------------------------------|--------|
| Density | g/cm ³ | ASTM D 792 | 1.12 |
| Durometer Hardness, 3 sec | Shore A | ASTM D 2240 | 80.00 |
| Tensile Strength at Break | MPa | ASTM D412, Method A | 6.00 |
| Mod.of Elasticity %100 | MPa | ASTM D412, Method A | 3.10 |
| Mod.of Elasticity %300 | MPa | ASTM D412, Method A | 4.30 |
| Elongation at break | % | ASTM D412, Method A | 500.00 |
| Compression Set | % at 23°C, 22 h | ASTM D 395, Type 2, Method B | 23.00 |
| Compression Set | % at 70°C, 22 h | ASTM D 395, Type 2, Method B | 49.00 |
| Compression Set | % at 100°C, 22 h | ASTM D 395, Type 2, Method B | 69.00 |
| Flammability Rating | HB, V0, V1, V2 | UL 94 | V0 |
| Tear Resistance | N/mm | ASTM D624 | 37.00 |

Electrical Properties

| Property | Unit | Standard | Value |
|----------------------------|-------|-----------|-------|
| Dielectric Strength, KV/mm | KV/mm | ASTM D149 | 15.50 |
| Dielectric Constant | | ASTM D150 | 3.03 |
| Volume resistivity | Ω.cm | ASTM D257 | 3.74 |

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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 | 90 |
| Drying time | hours | 2 |
| Rear Zone temp. | °C | 155- 175 |
| Middle Zone temp. | °C | 165- 185 |
| Front Zone temp. | °C | 170- 190 |
| Nozzle Temperature | °C | 180- 210 |
| Injection Speed | - | Moderate |
| Injection Time | sec. | 2- 4 |
| 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- 3.0:1 |
| Screw L/D ratio | - | 18- 24 |
| Residence time | - | 1-2 shot |
| Cushion size | mm | 8 |
| Suggested Max Regrind | % | 20 |
| Drying time | hours | 2 |
| Screw Comp. Ratio | - | 1.5:1- 3.0:1 |
| Screw L/D | - | 18- 30 |
| Feed Zone temp. | °C | 155- 165 |
| Rear Zone temp. | °C | 160- 180 |
| Center Zone temp. | °C | 165- 185 |
| Front Zone temp. | °C | 170- 190 |
| Head temp. | °C | 180- 210 |
| Die temp. | °C | 185- 215 |
| 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 | 1.08 |
| Across Flow | % | ASTM D955 | 0.98 |

Notes

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

