

Topolymer[®] 9410-851B

Thermoplastic Vulcanizate

Product Description

Topolymer[®] 9410-851B is a heat-stabilized PP/EPDM based Thermoplastic Vulcanizate (TPV) in the family of Thermoplastic Elastomer (TPE). This material is designed for a wide range of applications such automotive underhood, sealing systems, covers, electricals or other parts where softness and conformity are needed. This grade can be processed on conventional thermoplastics processing equipments for Injection Molding, Extrusion and Blow Molding or other hot melt processes. It is completely recyclable.

General

Appearance Feature Compliance Form Packaging ✓ Black Color
✓ High Resilience
✓ RoHS
✓ Pellet
✓ 25kg/bag

 \checkmark Weather Resistance \checkmark REACH

 \checkmark Chemical Resistance

Technical Property

| Typical Properties | Typical Value | Unit | Test Method |
|---|---------------|---------|-------------|
| Hardness | 93 | Shore A | ASTM D2240 |
| Density | 0.93 | g/cm³ | ASTM D792 |
| Tensile Strength at break | 13.9 | MPa | ASTM D412 |
| Tensile Strength at 100% | 5.4 | MPa | ASTM D412 |
| Elongation at Break | 750 | % | ASTM D412 |
| Tear Strength - Across Flow | 60 | KN/m | ASTM D624 |
| Compression Set 70°Cx22h | 50 | % | ASTM D395B |
| Brittleness Temperature | -50 | °C | ASTM D746 |
| Change in Tensile Strength In Air 150°Cx168h | +10 | % | ASTM D573 |
| Change in Ultimate Elongation In Air 150°Cx168h | -15 | % | ASTM D573 |
| Change in Durometer Hardness in Air 150°Cx168h | +2 | Shore A | ASTM D2240 |

The data are not to be defined as specifications

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Processing Information

| Injection | Typical Value | |
|-------------------------|---------------|--|
| Suggested Max Moisture | 0.08% | |
| Suggested Max Regrind | 20% | |
| Rear Temperature | 175-190℃ | |
| Middle Temperature | 180-195℃ | |
| Front Temperature | 185-200°C | |
| Nozzle Temperature | 185-210°C | |
| Mold Temperature | 25-55℃ | |
| Injection Rate | Fast | |
| Back Pressure | 0.35-0.7MPa | |
| Screw Speed | 100-200rpm | |
| Clamp Tonnage | 40-70MPa | |
| Screw L/D Ratio | 16:1-24:1 | |
| Screw Compression Ratio | 2:1-4:1 | |
| Extrusion | Typical Value | |
| Melt Temperature | 175-215°C | |
| Die Temperature | 175-215°C | |

Notes:

1) Topolymer[®] TPV is incompatible with PVC, Purge thoroughly before and after use of this product with a low flow (0.5 - 2.5 MFR) Polyethylene (PE) or Polypropylene (PP).

2) Topolymer[®] 9410-851B needs to be dry before use, dry pellets for 3 hours at 80°C

Contact Information

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