Versaflex™ OM 6258-1
Thermoplastic Elastomer

Key Characteristics

Product Description

Versaflex™ OM 6258-1 is specifically designed to bond to a variety of standard and modified nylon materials, including those which are glass-filled, heat stabilized and/or impact modified.

- Exceptional Colorability
- Outstanding Adhesion in Both Two-Shot and Insert Molding Processes
- Soft, Rubbery Grip
- Very Easy to Process

General

Material Status
- Commercial: Active

Regional Availability
- Africa & Middle East
- Asia Pacific
- Latin America
- North America

Features
- Good Adhesion
- Good Colorability
- Good Processability

Uses
- Lawn and Garden Equipment
- Overmolding
- Power/Other Tools

RoHS Compliance
- RoHS Compliant

Appearance
- Natural Color

Forms
- Pellets

Processing Method
- Injection Molding

Technical Properties

<table>
<thead>
<tr>
<th>Physical</th>
<th>Typical Value (English)</th>
<th>Typical Value (SI)</th>
<th>Test Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Density / Specific Gravity</td>
<td>1.09</td>
<td>1.09</td>
<td>ASTM D792</td>
</tr>
<tr>
<td>Molding Shrinkage - Flow</td>
<td>0.014 to 0.020 in/in</td>
<td>1.4 to 2.0 %</td>
<td>ASTM D955</td>
</tr>
</tbody>
</table>

Elastomers

| Tensile Stress (100% Strain, 73°F (23°C)) | Typical Value (English) | 275 psi | 1.90 MPa | ASTM D412 |
| Tensile Stress (300% Strain, 73°F (23°C)) | 385 psi | 2.65 MPa | ASTM D412 |
| Tensile Strength (Break, 73°F (23°C)) | 400 psi | 2.76 MPa | ASTM D412 |
| Tensile Elongation (Break, 73°F (23°C)) | 350 % | 350 % | ASTM D412 |
| Tear Strength | 105 lbf/in | 18.4 kN/m | ASTM D624 |
| Compression Set (73°F (23°C), 22 hr) | 23 % | 23 % | ASTM D395B |

Hardness

| Durometer Hardness (10 sec) | Typical Value (English) | 62 | 62 | ASTM D2240 |

Fill Analysis

| Apparent Viscosity | Typical Value (English) | 31.6 Pa·s | 31.6 Pa·s | ASTM D3835 |

Processing Information

<table>
<thead>
<tr>
<th>Injection</th>
<th>Typical Value (English)</th>
<th>Typical Value (SI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suggested Max Regrind</td>
<td>20 %</td>
<td>20 %</td>
</tr>
<tr>
<td>Rear Temperature</td>
<td>360 to 400 °F</td>
<td>182 to 204 °C</td>
</tr>
<tr>
<td>Middle Temperature</td>
<td>470 to 510 °F</td>
<td>243 to 266 °C</td>
</tr>
</tbody>
</table>

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<th>Injection</th>
<th>Typical Value (English)</th>
<th>Typical Value (SI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Front Temperature</td>
<td>480 to 520 °F</td>
<td>249 to 271 °C</td>
</tr>
<tr>
<td>Nozzle Temperature</td>
<td>490 to 530 °F</td>
<td>254 to 277 °C</td>
</tr>
<tr>
<td>Processing (Melt) Temp</td>
<td>480 to 520 °F</td>
<td>249 to 271 °C</td>
</tr>
<tr>
<td>Mold Temperature</td>
<td>55 to 85 °F</td>
<td>13 to 29 °C</td>
</tr>
<tr>
<td>Back Pressure</td>
<td>0.00 to 80.0 psi</td>
<td>0.00 to 0.552 MPa</td>
</tr>
<tr>
<td>Screw Speed</td>
<td>80 to 120 rpm</td>
<td>80 to 120 rpm</td>
</tr>
</tbody>
</table>

**Injection Notes**

- Purge thoroughly before and after use of this product with a low flow (0.5 - 2.5 MFR) polyethylene (PE) or polypropylene (PP).
- Regrind levels up to 20% can be used with Versaflex™ OM 6258-1 with minimal property loss, provided that the regrind is free of contamination. To minimize losses during molding, the melt temperature should remain as low as possible. The final determination of regrind effectiveness should be determined by the customer.
- Versaflex™ OM 6258-1 has good melt stability. Maximum residence times may vary, depending on the size of the barrel. Generally, the barrel should be emptied if it is idle for periods of 8 - 10 minutes or longer.

- Drying is not Required
- Injection Speed: 3 to 6 in/sec
  - 1st Stage - Boost Pressure: 300 to 800 psi
  - 2nd Stage - Hold Pressure: 0% of Boost
  - Hold Time (Thick Part): 0 to 4 sec
  - Hold Time (Thin Part): 0 to 3 sec

**Notes**

1. Typical values are not to be construed as specifications.
2. Die C
3. 2 hr

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