Crestamould® T29 Extrudable
Polyester-based extrudable and machinable tooling compound

Product Overview
Crestamould® T29 Extrudable is a modified polyester compound designed for the milling of large plugs or production moulds with CNC multiple axis machines. This material combines unique qualities and it can be extruded up to a thickness of approx. 15mm (0.6”). Crestamould® T29 Extrudable provides a homogenous substrate that prevents print from the underlying structure.

Features and Benefits
- Fast application
- Tough and resilient
- Maintains dimensional tolerance over time
- Low shrinkage, low exotherm
- Easy to cut and machine with carbide tools
- Machines with chips - low dust generation
- Low tool wear
- Remarkable profile of finished parts
- No settling in the equipment
- Easy to repair - bonds to itself
- Compatible with polyester sanding primers
- Constant hardness over time, after 24 hours, or after 6 months

General Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colour</td>
<td>Light blue to light beige when cured</td>
</tr>
<tr>
<td>Density</td>
<td>0.78 - 0.83 g/cc; 6.5 - 6.6 lbs gallon</td>
</tr>
<tr>
<td>Viscosity, RV1 PP35Ti @ 6.0 25°C</td>
<td>60,000 - 100,000 mPas</td>
</tr>
<tr>
<td>Viscosity, RV1 PP35Ti @ 0.6 25°C</td>
<td>500,000 - 1,000,000 mPas</td>
</tr>
<tr>
<td>Gel time @ 25°C - 100g @ 2% M50</td>
<td>20 - 30 minutes</td>
</tr>
<tr>
<td>Peak Exotherm 100g Mass</td>
<td>&lt; 65°C</td>
</tr>
</tbody>
</table>

Mechanical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hardness after 24 hours</td>
<td>70 Shore D</td>
</tr>
<tr>
<td>Tg</td>
<td>90°C</td>
</tr>
</tbody>
</table>
Application

Crestamould® T29 Extrudable exhibits anti-sag properties in bulk areas of up to 15mm in thickness. Do not apply the tooling paste thicker than 15mm at any one time to avoid excessive heat build-up/cracking. Apply uniformly and allow to gel, exotherm and cool down.

When applying material in corners or edges, avoid applying over insufficiently cured material as this may induce a stress fracture over time.

Tool marks are removed with 80-120 grit sandpaper. The surface needs no further preparation prior to sanding and primer application.

Equipment

Crestamould® T29 Extrudable is dispensed through a suitable internal mix catalyst pumping system with a ram-type equipment. Recommended ram pressure is 40 psi. Dispensing rate is subject to ram and dispensing pressure being applied.

Please contact Scott Bader’s technical services for information and advice.

Machining

Use carbide tools. End-mill tools are used for the majority of the work, ball-end tools for finishing. Adjust speeds to avoid overheating or overloading and material pull out. Do not leave the CNC unattended. Brush or blow off material as it accumulates on flat surfaces. If possible, blow air at tool-tip. A shop temperature of 24°C (75°F) and above will improve machining and reduce tool wear. Colder temperature will make the Crestamould® T29 Extrudable harder. Remove shavings daily from part and do not leave machine unattended when in use.

Additional Information

Shelf life

If stored correctly, Crestamould® T29 Extrudable has a shelf life of 9 months.

Storage

The product should be kept in securely enclosed containers. Storage should be in a dry place and out of direct sunlight. The temperature should be between 18-25°C (65-77°F). Allow material to reach shop temperature before using. Keep containers closed to eliminate styrene evaporation and to avoid change in properties.