

# EcoTPESuper

- Recycled Thermoplastic Elastomers
- 30-50 % Recycled Content
- Pellets with Black Colour

## EcoTPESuper® Flow

	Hardness	Tensile Strength	Stress at 100% Strain	Stress at 300% Strain	Elongation at break	Tear Strength
	<i>ISO 868</i>	<i>ISO 37</i>	<i>ISO 37</i>	<i>ISO 37</i>	<i>ISO 37</i>	<i>ISO 34</i>
	<i>Shore A</i>	<i>MPa</i>	<i>MPa</i>	<i>MPa</i>	<i>%</i>	<i>kN/m</i>
<b>EcoTPESuper Flow - 75</b>	74	6.1	2.9	4.5	480	14
<b>EcoTPESuper Flow - 85</b>	85	9	4.5	6.3	540	18

## EcoTPESuper® Elastic

	Hardness	Tensile Strength	Stress at 100% Strain	Stress at 300% Strain	Elongation at break	Tear Strength
	<i>ISO 868</i>	<i>ISO 37</i>	<i>ISO 37</i>	<i>ISO 37</i>	<i>ISO 37</i>	<i>ISO 34</i>
	<i>Shore A</i>	<i>MPa</i>	<i>MPa</i>	<i>MPa</i>	<i>%</i>	<i>kN/m</i>
<b>EcoTPESuper Elastic - 70</b>	68	6.8	2.7	4.3	550	15
<b>EcoTPESuper Elastic - 90</b>	86	10	4.8	6.7	560	21

## EcoTPESuper® Strength

	Hardness	Tensile Strength	Stress at 100% Strain	Stress at 300% Strain	Elongation at break	Tear Strength
	<i>ISO 868</i>	<i>ISO 37</i>	<i>ISO 37</i>	<i>ISO 37</i>	<i>ISO 37</i>	<i>ISO 34</i>
	<i>Shore A</i>	<i>MPa</i>	<i>MPa</i>	<i>MPa</i>	<i>%</i>	<i>kN/m</i>
<b>EcoTPESuper Strength - 70</b>	71	8.3	3.1	4.7	730	17
<b>EcoTPESuper Strength - 90</b>	86	10	4.9	6.5	610	27

# EcoTPESuper

## Injection Moulding Guide

### Processing:

- **Pre-Drying** is generally not necessary but can be carried out for 3-4 h at 70 °C.
- **Cylinder Temperature:** Injection moulding recommended with 180-210 °C barrel temperature.
- **Mould Temperature:** 30-60 °C recommended mould temperature.

**Screw Speed & Back Pressure:** It is recommended to use a screw speed that plasticize EcoTPESuper just prior to the next shot and a back pressure required to avoid leakage in the mould after the shot.

**Decompression** of 5-15 mm is recommended generally.

**Injection Pressure:** Orientation, overheating and overfilling can occur when too high injection pressures are used. Use the minimal injection pressure required to achieve uniform filling of the mould and a smooth surface.

**Injection Speed:** EcoTPESuper exhibit shear thinning that reduces the viscosity by increasing the share rate. High injection speeds are thus advantages for filling the mould.  
A small material cushion of about 5 mm is recommended to avoid follow-up packing.

**Holding & Holding Pressure Time:** It is recommended to optimize the holding pressure and holding time to avoid both overfilling and avoid shrink marks. Overfilling is the most common of the above-mentioned artefacts which can be avoided by using low holding pressures and short holding times.

**Venting** is necessary due to that normal/high injection speed should be used during injection moulding of EcoTPESuper. Generally, a vent with 0.01-0.02 mm groove depth is sufficient.

**Clamping Force:** There is generally no need to apply a high clamping force and a mould pressure of 25-45 MPa are generally sufficient depending on mould size.

### Cooling Time

Generally a cooling time of 15-25 s is sufficient for 2 mm thickness while cooling times of 30-60 s are normally sufficient for a thickness in between 2-6 mm.

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