

## FILOFlex 55 D

### Characteristic:

Thermoplastic Polyester-Polyurethane with excellent mechanical properties and wear resistance, good damping characteristics and a high resilience performance.  
 Processable by injection moulding and extrusion.

Property	Unit	Value	Test method according to
Hardness	Shore D	<b>55</b>	DIN ISO 7619-1
Density	g/cm <sup>3</sup>	<b>1,25</b>	DIN EN ISO 1183-1-A
Tensile strength	MPa	<b>45</b>	DIN 53504-S2 / ISO 37
Elongation at break	%	<b>500</b>	DIN 53504-S2 / ISO 37
Stress at 20 % elongation	MPa	<b>13</b>	DIN 53504-S2 / ISO 37
Stress at 100 % elongation	MPa	<b>16</b>	DIN 53504-S2 / ISO 37
Stress at 300 % elongation	MPa	<b>23</b>	DIN 53504-S2 / ISO 37
Modulus of elasticity – tensile test	MPa	<b>200</b>	DIN EN ISO 527
Tear strength	N/mm	<b>150</b>	DIN ISO 34-1Bb
Abrasion loss	mm <sup>3</sup>	<b>25</b>	DIN ISO 4649-A
Compression set at room temperature	%	<b>30</b>	DIN ISO 815
Compression set at 70 °C	%	<b>45</b>	DIN ISO 815
Notched impact strength (Charpy) + 23°C - 30°C	kJ/m <sup>2</sup> kJ/m <sup>2</sup>	<b>no break 13</b>	DIN EN ISO 179-1

Test plaques are manufactured by injection moulding from pre-dried granules (water content of ≤0,02%). Test plaques are aged 20 hrs at 100°C. Specimens are cut from test plaques. Test conditions: 23°C ± 2°C and 50% ± 6% rel. humidity.

These are general guidance data. No statement regarding specific properties. All supplies are subject to detailed specifications to be agreed-up in each individual case and containing, among others, the tolerances to be specified therein.

### Storage and handling:

FILOFlex is hygroscopic, therefore storage in dry conditions and original container is recommended.