## Properties of Polypropylene Battery Cases

<table>
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<tr>
<th>Properties</th>
<th>Mechanical</th>
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<td>Units</td>
<td>g/10 min</td>
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### Moplen EP1006
- 2:16
- Tensile Modulus: 1450 MPa
- Tensile Stress at Yield: 27 MPa
- Tensile Stress at Failure: 6,1 MPa
- Charpy Impact Notched: >50
- Ductile/Brittle Transition Temp.: 23°C, 0°C, -20°C
- Vicat Softening Temp.: 10N, 50N
- Heat Deflection Temp.: HDT/B
- Haze (1 mm): 88%
- Grade: High impact strength, heat stability (heat ageing resistant agent), low warpage, low stress whitening; car starter batteries

### Moplen EP340K
- 4
- Tensile Modulus: 1100 MPa
- Tensile Stress at Yield: 20 MPa
- Tensile Stress at Failure: 5 MPa
- Charpy Impact Notched: >50
- Ductile/Brittle Transition Temp.: 66 MPa
- Vicat Softening Temp.: 13 MPa
- Heat Deflection Temp.: 7 MPa
- Haze (1 mm): 85%
- Grade: High impact strength and low warpage; car starter batteries, luggage

### Moplen EP300K*
- 4
- Tensile Modulus: 1200 MPa
- Tensile Stress at Yield: 27 MPa
- Tensile Stress at Failure: 7 MPa
- Charpy Impact Notched: >50
- Ductile/Brittle Transition Temp.: 10 MPa
- Vicat Softening Temp.: 5,5 MPa
- Heat Deflection Temp.: 4 MPa
- Haze (1 mm): 75%
- Grade: High impact / stiffness balance; car starter batteries, crates

### Moplen EP332L
- 7
- Tensile Modulus: 1200 MPa
- Tensile Stress at Yield: 26 MPa
- Tensile Stress at Failure: 8 MPa
- Charpy Impact Notched: >50
- Ductile/Brittle Transition Temp.: 7,5 MPa
- Vicat Softening Temp.: 4,5 MPa
- Heat Deflection Temp.: 4 MPa
- Haze (1 mm): 70%
- Grade: High fluidity, high impact strength, heat stability (heat ageing resistant agent) and low warpage; car starter batteries, AGM batteries

### Moplen EP340M
- 7,5
- Tensile Modulus: 1150 MPa
- Tensile Stress at Yield: 21 MPa
- Tensile Stress at Failure: 6 MPa
- Charpy Impact Notched: >50
- Ductile/Brittle Transition Temp.: 45 MPa
- Vicat Softening Temp.: 9 MPa
- Heat Deflection Temp.: 7 MPa
- Haze (1 mm): 58%
- Grade: High fluidity, high impact strength and low warpage; car starter batteries, crates, containers

### Moplen EP548P
- 16
- Tensile Modulus: 1550 MPa
- Tensile Stress at Yield: 28 MPa
- Tensile Stress at Failure: 5 MPa
- Charpy Impact Notched: >50
- Ductile/Brittle Transition Temp.: 8 MPa
- Vicat Softening Temp.: 4 MPa
- Heat Deflection Temp.: 3 MPa
- Haze (1 mm): 70%
- Grade: Nucleated grade containing anistatic agent; it offers very high fluidity and good impact / stiffness balance; car starter batteries, crates, containers

* Grade available from Basell Orlen Polyeolefins plant in Plock

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