**UNIFLON 50**

- Colour: Blue
- Description and application: Uniflon 50 is a superior performance biaxially orientated PTFE sheet sealing material with more conformable properties, ideally suited to irregular flanges. Uniflon 50 is specifically designed for use in low bolt loaded flanges. Typical flanges include glass lined, ceramic or plastic coated or uneven and badly distorted flanges. Uniflon 50 is suitable for chemical media across pH (0–14) range, with exception of melting alcali metals, fluorine gas, hydrogen fluoride. The sheets are excellent for handling and cutting.

**Technical properties**

<table>
<thead>
<tr>
<th>Marking according to</th>
<th>DIN 28 091-3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Certificate</td>
<td>FDA</td>
</tr>
<tr>
<td>Sheet size m</td>
<td>1.0 x 1.0</td>
</tr>
<tr>
<td>Thickness mm</td>
<td>0.75</td>
</tr>
<tr>
<td>Max. temperature °C</td>
<td>0 to +260</td>
</tr>
<tr>
<td>Max. pressure bar</td>
<td>85</td>
</tr>
<tr>
<td>Density g/cm³</td>
<td>1.4</td>
</tr>
<tr>
<td>Compressibility (%)</td>
<td>40</td>
</tr>
<tr>
<td>Recovery (%)</td>
<td>30</td>
</tr>
<tr>
<td>Residual stress MPa</td>
<td>25</td>
</tr>
<tr>
<td>Tensile strength MPa</td>
<td>11</td>
</tr>
<tr>
<td>Creep relaxation %</td>
<td>35</td>
</tr>
<tr>
<td>Gas permeability cm³/min</td>
<td>&lt; 0.02</td>
</tr>
<tr>
<td>Liquid leakage mL/hod</td>
<td>0.23</td>
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</tbody>
</table>

**Legend:**

- * max. values can not be used simultaneously
- 1 - suitable subject to chemical compactability
- 2 - suitable in some cases but check your application requirements with the technical team
- 3 - this area technical consultation is mandatory

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**UNIFLON 51**

- Colour: Pink
- Description and application: Uniflon 51 is a superior performance biaxially orientated PTFE sheet sealing material with silica filler. A general purpose grade for sealing applications across the whole pH (0–14) range. Uniflon 51 is particulary suitable for use with strong acids (except hydrofluoric acid) and alkalis. Other applications include solvents, fuels, water, steam and chlorine compounds. The sheets are excellent for handling and cutting.

**Technical properties**

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
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<tr>
<td>Tensile strength MPa</td>
<td>11</td>
</tr>
<tr>
<td>Creep relaxation %</td>
<td>35</td>
</tr>
<tr>
<td>Gas permeability cm³/min</td>
<td>&lt; 0.01</td>
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<tr>
<td>Liquid leakage mL/hod</td>
<td>0.21</td>
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</tbody>
</table>

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**UNIFLON 53**

- Colour: White
- Description and application: Uniflon 53 is a high performance biaxially orientated PTFE sheet material with barium sulphate filler. A general purpose grade for sealing applications across the whole pH (0–14) range. It is suitable for use with hydrofluoric acid, but not pure liquid hydrogen fluoride. Uniflon 53 can also be used with alkalis, solvents, fuels, water, steam and chlorine. The sheets are excellent for handling and cutting.

**Technical properties**

<table>
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<th>Marking according to</th>
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<td>Thickness mm</td>
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<tr>
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</tr>
<tr>
<td>Max. pressure bar</td>
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<td>Density g/cm³</td>
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<td>Recovery (%)</td>
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<td>Gas permeability cm³/min</td>
<td>&lt; 0.01</td>
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<tr>
<td>Liquid leakage mL/hod</td>
<td>0.22</td>
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</tbody>
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Chemical resistance table

PTFE

Uniflon 50 | Uniflon 51 | Uniflon 53
---|---|---
Acetaldehyde | A | A | A
Acetamide | A | A | A
Acetic Acid | A | A | A
Acetic Acid Glacial | A | A | A
Acetic Anhydride | A | A | A
Acetone | A | A | A
Acetyl Chloride | A | A | A
Acetylene | A | A | A
Acrylic Acid | A | A | A
Acrylonitrile | A | A | A
Acrylic Acid | A | A | A
Acrylonitrile | A | A | A
Acrylic Acid | A | A | A
Acrylonitrile | A | A | A
Acrylic Acid | A | A | A
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Acrylic Acid | A | A | A
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Acrylic Acid | A | A | A
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Acrylic Acid | A | A | A
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Acrylic Acid | A | A | A
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Acrylonitrile | A | A | A
Acrylic Acid | A | A | A
Acrylonitrile | A | A | A
Acrylic Acid | A | A | A
Acrylonitrile | A | A | A
Acrylic Acid | A | A | A
Acrylonitrile | A | A | A
Acrylic Acid | A | A | A
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