Tecnoflon® VPL FKM
A Unique Combination of Very Low Temperature and High Chemical Resistance
**Tecnoflon® VPL FKM for Very Low Temperature Performance**

Tecnoflon® VPL is a new series of low-temperature peroxide-curable FKM grades, which have the lowest cold temperature flexibility among all fluoroelastomers, with TR10 as low as −40°C.

Thanks to Solvay’s proprietary technologies, Tecnoflon® VPL series show:
- The lowest cold temperature flexibility
- No loss of chemical resistance
- Outstanding processing
- Improved sealing & mechanical properties

Tecnoflon® VPL series, along with all peroxide-curable Tecnoflon® FKM, show:
- The lowest permeability fuel
- The best retention of sealing force at high temperature when compared to other elastomers such as FVMQ, TFE/P and HNBR

Tecnoflon® VPL series have been specially designed to withstand the most stringent specifications for automotive and oil field applications, and is currently the material of choice for sealing solutions used in oil drilling, liquefied petroleum gas, compressed natural gas and diesel injection.

**Breakthrough MOVE Monomer Technology**

Tecnoflon® VPL series uses Solvay’s proprietary MOVE monomer technology, allowing the unique combination of excellent low temperature behavior, while maintaining the chemical resistance of standard fluoroelastomers with high fluorine content (70%).

**Low Temperature Behavior**

Tecnoflon® VPL series shows a unique low temperature flexibility when compared with standard FKM’s, outperforming other elastomers such as FVMQ and LT-HNBR.

**Excellent Chemical Resistance**

Tecnoflon® VPL series show excellent chemical resistance in very aggressive media, such as ethanol/fuel and methanol/fuel mixtures. Their extremely low volumes swell when in contact with those media; make of them the automotive industry standard for fuel injector O-rings:

**Fuel resistance comparison**

- Fuel C
- Ethanol

**Low temperature flexibility**

-70 – 60 – 50 – 40 – 30 – 20 – 10 0

TR10 [°C]

**Broad Portfolio to Fulfill Every Requirement**

A full range of Tecnoflon® VPL grades are available to fulfill every requirement and can be transformed using injection, compression and transfer molding technologies:

**VPL series**

- VPL 85540
- VPL 45535
- VPL 85730
- PL 855
- FKM 70 % F

**Fuel resistance**

- Fuel comparable to 70 % F FKM

<table>
<thead>
<tr>
<th>Grade</th>
<th>VPL 45730</th>
<th>VPL 85730</th>
<th>VPL 45535</th>
<th>VPL 55540</th>
<th>VPL 85540</th>
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<tbody>
<tr>
<td>Fluorine content [%]</td>
<td>67</td>
<td>67</td>
<td>65</td>
<td>65</td>
<td>65</td>
</tr>
<tr>
<td>TR10 [°C]</td>
<td>−30</td>
<td>−30</td>
<td>−35</td>
<td>−40</td>
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<tr>
<td>Compress set [%]</td>
<td>19</td>
<td>19</td>
<td>20</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>70h at 200°C OR #214</td>
<td>25</td>
<td>45</td>
<td>25</td>
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<td>45</td>
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</tbody>
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