AGC Chemicals Americas is a leading global supplier of high-performance material science solutions including Fluon® fluoropolymer resins, Fluon™ custom fluoropolymer compounds, AFLAS® fluoroelastomers, and a wide variety of other specialty products. The product range offers excellent resistance against heat, chemicals, and corrosion, and has a broad base of applications in industrial, automotive, aerospace, oil and gas, and other markets where long-lasting exceptional performance is necessary.

**AFLAS® FFKMs - Elastomers for Exceptional Performance in the Most Challenging Conditions**

AGC’s AFLAS® FFKM grades are perfluorinated elastomers capable of withstanding very high service temperatures. Being fully fluorinated, FFKMs exhibit the ultimate in sealing performance in all manner of aggressive chemical environments. AGC Chemicals embraces future challenges and continuously develops materials for ever-evolving applications and markets.

With their outstanding chemical performance and high temperature capabilities, AFLAS® FFKMs are perfectly suited for use in o-rings and seals in the harshest conditions.

**Advantages**
- Chemical resistance
- Oil resistance
- Heat resistance
- High tensile strength

**Applications**
- Sealing parts for CPI
- Sealing parts for analytical instruments
- Instruments for semiconductor manufacturing
- Sealing parts for Oil & Gas

![Comparison of Fluoroelastomer Performance](chart)
AFLAS® FFKM Grade Range

AGC has developed a range of different AFLAS® FFKM products for various applications depending on the service conditions or other specific needs.

PM-1100: the introduction to FFKM

When FEPM and FKM-type elastomers don’t meet your requirements, this is the next level in terms of chemical performance. It is capable of operating at 230°C continuously and occasional peaks of 250°C. Our most economical grade for general applications.

PM-3000: the capable all-rounder

The next level up from PM-1100. This grade has a continuous service temperature of 250°C with peak temperatures around 270°C. With improved compression set, PM-3000 will sustain pressure for longer periods meaning reduced maintenance needs.

PM-3500: the pure one for demanding applications

Specifically developed for applications where high-purity is vital to the customers’ processes, PM-3500 achieves a Shore A hardness of 70 without the need for fillers that could lead to particulate generation. It is plasma resistant and therefore ideal for use in the etching process in semiconductor manufacture.

<table>
<thead>
<tr>
<th>Grade</th>
<th>Service Temperature (°C)</th>
<th>Compression Set* (%)</th>
<th>Chemical Ind.</th>
<th>Oil and Gas</th>
<th>Semiconductor</th>
<th>Plasma</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>PM-1100</td>
<td>230</td>
<td>9.6</td>
<td>●</td>
<td>●</td>
<td></td>
<td></td>
<td>Lowest price point</td>
</tr>
<tr>
<td>PM-3000</td>
<td>250</td>
<td>6</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td></td>
<td>Versatile; good compression set</td>
</tr>
<tr>
<td>PM-3500</td>
<td>250</td>
<td>17</td>
<td></td>
<td>●</td>
<td>●</td>
<td></td>
<td>High hardness with no filler</td>
</tr>
</tbody>
</table>

* Compression Set data measured on ASTM Type 1 Button, 70h, 200°C

The above grades are all peroxide curable for ease of handling and processing. Our R&D team is constantly looking at ways to improve our offering in order to push the boundaries of possibility. If you have any specific requirements or ideas you would like to discuss, please get in touch.