Algoflon® D 3511 F is a white aqueous PTFE dispersion and is produced without any intentional use or addition of PFOA. It is designed mainly for coating processes but can also be used for impregnation.

Algoflon® D 3511 F has superior film forming behavior and is well-suited to produce final items with excellent gloss. Algoflon® D 3511 F exhibits good wetting properties and high shear stability.

Main features of Algoflon® D 3511 F PTFE dispersion are:
- NO polyethoxylated alkylphenols
- Superior film building behavior
- Excellent surface finishing and gloss
- High shear stability

### General

**Material Status**
- Commercial: Active

**Availability**
- Asia Pacific
- Europe
- North America

**Features**
- Chemical Resistant
- High Heat Resistance
- Low Friction

**Uses**
- Coating Applications
- Impregnation Applications

**Appearance**
- White

**Forms**
- Latex

### Physical

<table>
<thead>
<tr>
<th>Property</th>
<th>Typical Value</th>
<th>Unit</th>
<th>Test method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Particle Size</td>
<td>240</td>
<td>nm</td>
<td>Internal Method</td>
</tr>
<tr>
<td>Density</td>
<td>1.50</td>
<td>g/cm³</td>
<td>ASTM D4441</td>
</tr>
<tr>
<td>pH</td>
<td>&gt; 9.0</td>
<td></td>
<td>ASTM D4441</td>
</tr>
</tbody>
</table>

### Fill Analysis

<table>
<thead>
<tr>
<th>Property</th>
<th>Typical Value</th>
<th>Unit</th>
<th>Test method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brookfield Viscosity - (20°)</td>
<td>20</td>
<td>mPa·s</td>
<td>ASTM D2196</td>
</tr>
</tbody>
</table>

### Additional Information

<table>
<thead>
<tr>
<th>Property</th>
<th>Typical Value</th>
<th>Unit</th>
<th>Test method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non Ionic Surfactant - (on the mixture)</td>
<td>3.5</td>
<td>wt%</td>
<td>ASTM D4441</td>
</tr>
<tr>
<td>PTFE Content - (on the mixture)</td>
<td>59.0</td>
<td>wt%</td>
<td>ASTM D4441</td>
</tr>
</tbody>
</table>
Algoflon® D 3511 F
polytetrafluoroethylene

Processing

- Algoflon® D 3511 F is processed according to conventional coating methods. Generally the procedure involves application (e.g. by spraying) on a pre-treated substrate or on a base coat and then heating to remove water and surfactant from the coated item. Sintering above the crystalline melting point of the coated resin is then required to obtain the finished coated article.
- Algoflon® D 3511 F can be processed neat or appropriately formulated. Also, it can be used diluted using distilled or deionized water. Formulation, line speed and oven temperature must all be well controlled for optimized features of the coated substrates.

Storage and Handling

- Algoflon® PTFE dispersions must be stored under suitable temperature conditions to ensure prolonged stability. Temperatures lower than 5°C must be avoided to prevent irreversible settling. Also, some settling may occur on prolonged standing and/or heat exposure. It is therefore strongly recommended that the product is always kept at temperatures below 35°C. The optimum storage temperature range is 10-25°C. It is also advisable that the product is homogenized by gentle rolling or stirring once per month and prior to use.
- Prolonged exposure of the liquid to air could lead to some coagulation at the surface due to water evaporation. For this reason and also to avoid contamination, it is recommended to keep the containers closed when not in use.

Safety and Toxicology

- Before using Algoflon® PTFE dispersions consult the product Material Safety Data Sheet and follow all label directions and handling precautions.
- As with all PTFE materials, handling and processing should only be carried out in well ventilated areas. Venting units should be installed above processing equipment. Fumes must not be inhaled and eye and skin contact ought to be avoided. In case of skin contact wash with soap and water. In case of eye contact flush with water immediately and seek medical help. Do not smoke in areas contaminated with powder, vapor or fumes.
- See Material Safety Data Sheet for detailed advice on waste disposal methods.

Packaging

- Algoflon® D 3511 F is packaged in either 30 kg drums or 1500 kg IBC’s.

Additional Technical Information

- For Material Safety Data Sheet or additional technical information consult your Solvay Specialty Polymers sales representative, or contact us by e-mail.

Notes

Typical properties: these are not to be construed as specifications.
Safety Data Sheets (SDS) are available by emailing us or contacting your sales representative. Always consult the appropriate SDS before using any of our products.

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