LUBRICANT POWDER
GRADE FL1680

Description
FL1680 lubricant is a white, finely divided, low molecular weight powder manufactured from virgin PTFE feedstock. It has an average particle size of 11 microns, a narrow particle size distribution and low surface area. FL1680 is virtually immune from chemical attack, is water repellent, has good electrical insulation properties, a wide working temperature range and has excellent weathering and ageing characteristics.

Applications
FL1680 is primarily used as an additive in other materials to improve wear resistance and enhance lubricity, non-stick and frictional characteristics of the host media. It may be incorporated into products such as printing inks, oils, greases and industrial finishes. FL1680 is particularly suitable for use in printing inks and industrial finishes due to its fine particle size but may also be used in oil, grease and sealing paste applications where low starting torque and a smooth sliding action is required.

Lubricant powder applications, properties and processing data are contained in the Lubricant Applications Brochure, available upon request.

This information sheet contains typical property data which should not be used for specification purposes.

Typical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Typical Value</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bulk density</td>
<td>450</td>
<td>g/l</td>
</tr>
<tr>
<td>Relative density</td>
<td>2.2</td>
<td>-</td>
</tr>
<tr>
<td>Particle size (Hegmann gauge)</td>
<td>AVE: 9</td>
<td>Microns</td>
</tr>
<tr>
<td>Particle size (Optical Microscope)</td>
<td>AVE: 11</td>
<td>Microns</td>
</tr>
<tr>
<td>Particle size (Sympatec laser diffraction)</td>
<td>D_{10}: 5</td>
<td>Microns</td>
</tr>
<tr>
<td></td>
<td>D_{50}: 15</td>
<td></td>
</tr>
<tr>
<td></td>
<td>D_{90}: 35</td>
<td></td>
</tr>
<tr>
<td>Surface area (Krypton adsorption)</td>
<td>0.8</td>
<td>m²/g</td>
</tr>
<tr>
<td>Melting peak temperature (D.S.C.)</td>
<td>328</td>
<td>°C</td>
</tr>
<tr>
<td>Service temperature range</td>
<td>-190 to 260</td>
<td>°C</td>
</tr>
<tr>
<td>FDA compliant composition?</td>
<td>YES</td>
<td>-</td>
</tr>
</tbody>
</table>
Packaging and Storage

FL1680 is supplied in 25 kg laminated fibreboard kegs. The powder is contained within two polythene liners, individually sealed. Kegs of FL1680 should be stored in cool dry conditions prior to use.

Food Contact Approval

Information on food contact approval is available from the AGC Chemicals Europe, Ltd Sales Office.

Disposal

Waste polymer should be disposed of by landfill in accordance with any local regulations for the disposal of products of low toxicity or may be incinerated under approved controlled conditions.

Safety In Use

Users must refer to the relevant Material Safety Data Sheet.

Information contained in this publication (and otherwise supplied to users) is based on our general experience and is given in good faith, but we are unable to accept responsibility in respect of factors which are outside our knowledge or control. All conditions, warranties and liabilities of any kind relating to such information, expressed or implied, whether arising under statute, tort or otherwise are excluded to the fullest extent permissible in law. The user is reminded that his legal responsibility may extend beyond compliance with the information provided. Freedom under patents, copyright and registered designs cannot be assumed.

Fluon® grades are general industrial grades. It is the responsibility of the purchaser to check that the specification is appropriate for any individual application. Particular care is required for special applications such as pharmaceutical, medical devices or food. Not all grades are suitable for making finished materials and articles for use in contact with foodstuffs. It is advisable to contact the AGC Chemicals Europe, Ltd sales office for the latest position. Users of Fluon® are advised to consult the relevant Health and Safety literature which is available from the AGC Chemicals Europe, Ltd sales office.

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If you have an application that you think would benefit by using PTFE, PFA, ETFE or Fluoroelastomer, please contact AGC Chemicals Europe, Ltd at one of the addresses below:

**AGC Chemicals Europe, Ltd**
PO Box 4, York House
Hillhouse International
Thomton Cleveleys
Lancashire
FY5 4QD
UK
Tel: +44 (0) 1253 861963
Fax: +44 (0) 1253 861950
Email: info@agcce.com
http://www.agcce.com

**AGC Chemicals America, Inc.**
55 E. Uwchlan Avenue, Suite 201
Exton
PA 19341
UNITED STATES OF AMERICA
Tel: (800) 424-PTFE (7833)
Tel: +1 610 423-4300 (outside USA)
Fax: +1 610 423-4301
Email: info@agcchem.com
http://www.agcchem.com

**AGC Chemicals**
Asahi Glass Co., Limited
Shin-Maranouchi Building
1-5-1, Maranouchi
Chiyoda-ku
Tokyo 100-8405
JAPAN
Tel: +81 3 3218 5875
Fax: +81 3 3218 7856
www.agc.com

**AGC Asia Pacific Pte. Ltd. Chemicals Business Division**
460 Alexandra Road
#30-02 PSA Building
SINGAPORE 119963
Tel: +65 6273 5656
Fax: +65 6276 8783
email: casey@sg.agc-chemicals.com

**AGC Chemicals Trading (Shanghai) Co., Ltd**
Room 2701-2705
Metro Plaza
555 Lou Shan Guan Road
Chang Ning Ward
Shanghai
China Post Code: 200051
Tel: 86-21-66386-2211
Fax: 86-21-66386-5377/5378
www.agcsh.com

**AGC Chemicals (Thailand) Co., Ltd**
24th Floor
Bangkok Insurance Building
25 South Sathom Road
Bangkok 10120
Thailand
Tel: 66-2-679-1600
Fax: 66-2-677-3135
www.acth.co.uk