Product Information
Specialty Lubricants

**Molykote® Z Powder**

**FEATURES**
- Excellent lubricating properties
- Reduction of friction and wear
- Resistant to oxidation
- Extreme pressure resistance
- Wide service temperature range

**COMPOSITION**
- Molybdenum disulphide

**Solid Lubricant**

**APPLICATIONS**
Molykote Z Powder can be used:
- as a dry burnished (rubbed-on) lubricating film for metallic contacts
- as a solid lubricant additive for self-lubricating plastics and sinter metal parts
- as a solid lubricant additive in metalworking compounds
- as a solid lubricant additive in brake lining application
- as run-in aid, in press-fittings, in Heavy Loads and Slow Speeds applications and also in extreme environments (for example in dusty atmospheres or extremes of temperatures)

**TYPICAL PROPERTIES**
Specification Writers: These values are not intended for use in preparing specifications. Please contact your local Dow Corning sales office or your Global Dow Corning Connection before writing specifications on this product.

<table>
<thead>
<tr>
<th>Test</th>
<th>Unit</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color</td>
<td>Black</td>
<td></td>
</tr>
<tr>
<td>Consistency</td>
<td>Free flowing powder</td>
<td></td>
</tr>
<tr>
<td>Purity (MoS2 content)</td>
<td>%</td>
<td>98</td>
</tr>
<tr>
<td>Particle size distribution (Laser Method)</td>
<td>µm</td>
<td>90 % ≤78.38</td>
</tr>
<tr>
<td>Malvern Mastersizer in 2-propanol</td>
<td>µm</td>
<td>50 % ≤31.59</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10 % ≤9.44</td>
</tr>
<tr>
<td>Particle size (Fisher Method)</td>
<td>µm</td>
<td>3 - 4</td>
</tr>
<tr>
<td>Service temperature range</td>
<td>ºC</td>
<td>-185 to +450</td>
</tr>
<tr>
<td>Service temperature range (in vacuum)</td>
<td>ºC</td>
<td>Up to 1100</td>
</tr>
<tr>
<td>Theoretical density (solid state)</td>
<td>g/cm³</td>
<td>4.8</td>
</tr>
<tr>
<td>Bulk density (powder state)</td>
<td>g/cm³</td>
<td>1.3</td>
</tr>
<tr>
<td>Water/moisture content</td>
<td>%</td>
<td>0.02</td>
</tr>
<tr>
<td>Almen Wieland machine OK load</td>
<td>N</td>
<td>&gt; 20000</td>
</tr>
<tr>
<td>Press-Fit test</td>
<td>µ</td>
<td>0.06</td>
</tr>
</tbody>
</table>

**HOW TO USE**
Rub the powder thoroughly in different directions on degreased dry surfaces using a hard brush or window leather. Can be applied by rotary brush, felt or polishing disks. Small parts should preferably be tumble coated. Add to plastic elastomers and sinter metals before forming.

**HANDLING PRECAUTIONS**
Product safety information required for safe use is not included. Before handling, read product and safety data sheets and container labels for safe use, physical and health hazard information. The material safety data sheet is available on the Dow Corning website at www.dowcorning.com. You can also obtain a copy from your local Dow Corning sales representative or Distributor or by calling your local Dow Corning Global Connection.
USABLE LIFE AND STORAGE
When stored at or below 20°C (68°F) in the original unopened bags, this product has a usable life of 60 months from the date of production.

PACKAGING
This product is available in 1kg can, 25kg bag, 100kg drum and 1,000kg big-bag.

LIMITATIONS
This product is neither tested nor represented as suitable for medical or pharmaceutical uses.

HEALTH AND ENVIRONMENTAL INFORMATION
To support Customers in their product safety needs, Dow Corning has an extensive Product Stewardship organization and a team of Health, Environment and Regulatory Affairs specialists available in each area.

For further information, please see our website, www.dowcorning.com or consult your local Dow Corning representative.

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