Molykote® Z Powder

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

COMPOSITION
- Molybdenum disulphide

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 a 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>Property</th>
<th>Unit</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Color</td>
<td></td>
<td>Charcoal gray to black</td>
</tr>
<tr>
<td></td>
<td>Consistency</td>
<td></td>
<td>Free flowing powder</td>
</tr>
<tr>
<td>CTM 1392</td>
<td>Purity (MoS₂ content)</td>
<td>%</td>
<td>98</td>
</tr>
<tr>
<td></td>
<td>Particle size distribution</td>
<td>µm</td>
<td>90% &lt;78.38</td>
</tr>
<tr>
<td></td>
<td>(Laser Method Malvern)</td>
<td></td>
<td>50% &lt;31.59</td>
</tr>
<tr>
<td></td>
<td>Mastersizer in 2-propanol</td>
<td></td>
<td>10% &lt;9.44</td>
</tr>
<tr>
<td>CTM 0268A</td>
<td>Particle size (Fisher Method)</td>
<td>µm</td>
<td>3 - 4</td>
</tr>
<tr>
<td></td>
<td>Service temperature range</td>
<td>°C</td>
<td>-185 to 400</td>
</tr>
<tr>
<td></td>
<td>Service temperature range (in vacuum)</td>
<td>°C</td>
<td>Up to 1100</td>
</tr>
<tr>
<td></td>
<td>Theoretical density (solid state)</td>
<td>g/cm³</td>
<td>4.8</td>
</tr>
<tr>
<td>ISO 3923-2</td>
<td>Bulk density (powder state)</td>
<td>g/cm³</td>
<td>1.3</td>
</tr>
<tr>
<td>CTM 0262 M</td>
<td>Water/moisture content</td>
<td>%</td>
<td>0.02</td>
</tr>
<tr>
<td></td>
<td>Almen Wieland machine OK load</td>
<td>N</td>
<td>&gt;20000</td>
</tr>
<tr>
<td></td>
<td>Press-Fit test</td>
<td>µ</td>
<td>0.048</td>
</tr>
</tbody>
</table>

*CTM: Corporate Test Method, copies of CTMs are available on request.

DESCRIPTION
Molykote® Z Powder is a solid lubricant that lubricates metal surfaces in many difficult and extreme environments e.g. metal/metal pairings at extreme loads and slow speeds, or metal/plastic pairings at low loads and low to medium speeds.

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 IN THIS DOCUMENT. BEFORE HANDLING, READ PRODUCT AND MATERIAL 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 DOWCORNING.COM, OR FROM YOUR DOW CORNING SALES APPLICATION ENGINEER, OR DISTRIBUTOR, OR BY CALLING DOW CORNING CUSTOMER SERVICE.

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 INFORMATION
This product is available in different standard container sizes. Detailed container size information should be obtained from your nearest Dow Corning sales office or Dow Corning distributor.

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 Product Safety and Regulatory Compliance (PS&RC) specialists available in each area.

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

LIMITED WARRANTY INFORMATION – PLEASE READ CAREFULLY
The information contained herein is offered in good faith and is believed to be accurate. However, because conditions and methods of use of our products are beyond our control, this information should not be used in substitution for customer’s tests to ensure that our products are safe, effective, and fully satisfactory for the intended end use. Suggestions of use shall not be taken as inducements to infringe any patent.

Dow Corning’s sole warranty is that our products will meet the sales specifications in effect at the time of shipment.

Your exclusive remedy for breach of such warranty is limited to refund of purchase price or replacement of any product shown to be other than as warranted.

TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, DOW CORNING SPECIFICALLY DISCLAIMS ANY OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE OR MERCHANTABILITY.

DOW CORNING DISCLAIMS LIABILITY FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES.

We help you invent the future.™

molykote.com