Two applications. One grease.

*Advanced double-duty technology for performance and cost benefits*

*Smart Lubrication™ Solutions from Dow Corning*
MOLYKOTE® G-5511
WATER TAP COMPOUND
ONE GREASE for TWO water tap applications from ONE single supplier
Dual Applications

*Molykote® G-5511 Water Tap Compound*

- Ceramics and plastics — one grease for both applications
- Meets requirements of DIN EN 817 test
Molykote® G-5511 Water Tap Compound

- Chemistry: silicone/PTFE
- Lubrication between ceramic discs, rubber gaskets and plastic components
- Meets several global standards for drinking water contact
- Excellent water resistance
- Improved coefficient of friction and tackiness/adhesion
- Good load-carrying capacity at lubrication point
Drinking Water Contact

*Molykote® G-5511 Water Tap Compound*

- Meets NSF/ANSI 61 Standard
- Complies with UBA guidelines for the hygienic assessment of lubricants with drinking water contact
- Complies with the requirements of the Water Regulation Advisory Scheme (BS6920:2000)
- Suitable for use with hot water (up to 85 °C) and cold water
**Molykote® G-5511 Water Tap Compound**

<table>
<thead>
<tr>
<th>Product</th>
<th>SRV</th>
<th>Penetration</th>
<th>Tack test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Ok-Load</td>
<td>CoF µ</td>
<td>mm/10</td>
</tr>
<tr>
<td><strong>Molykote® G-5511 Compound</strong></td>
<td>350 N</td>
<td>0,54</td>
<td>298</td>
</tr>
<tr>
<td>Competitor 1</td>
<td>350 N</td>
<td>0,60</td>
<td>220-250</td>
</tr>
</tbody>
</table>

**Molykote® G-5511 Water Tap Compound provides:**
- Better tackiness/adhesion properties
- Better coefficient of friction
- Good load resistance
OVERVIEW OF COMPETITORS
## Competitors’ Products Overview

<table>
<thead>
<tr>
<th>Product</th>
<th>Chemistry</th>
<th>SRV</th>
<th>Penetration</th>
<th>Tack test</th>
<th>Water resistance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Ok-Load</td>
<td>CoF µ</td>
<td>mm/10</td>
<td>FN (N)</td>
</tr>
<tr>
<td>Competitor 1</td>
<td>Silicone/PTFE</td>
<td>350 N</td>
<td>0,55</td>
<td>220-250</td>
<td>-5</td>
</tr>
<tr>
<td>Competitor 2</td>
<td>Silicone</td>
<td>250 N</td>
<td>0,5</td>
<td>310-340</td>
<td>-6</td>
</tr>
<tr>
<td>Competitor 3</td>
<td>Non-silicone</td>
<td>350 N</td>
<td>0,15</td>
<td>265-295</td>
<td>-8</td>
</tr>
<tr>
<td>Competitor 4</td>
<td>Silicone/PTFE</td>
<td>300 N</td>
<td>0,5</td>
<td>280-310</td>
<td>-4</td>
</tr>
</tbody>
</table>
Compatibility with Sealing Materials

<table>
<thead>
<tr>
<th>Sealing material</th>
<th>Blind test (weight change in %)</th>
<th>Test with Molykote® G-5511 (weight change in %)</th>
<th>Test with competitor (weight change in %)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silicone</td>
<td>-0,23</td>
<td>5,66</td>
<td>9,4</td>
</tr>
<tr>
<td>NBR</td>
<td>-0,58</td>
<td>-5,93</td>
<td>-6,23</td>
</tr>
</tbody>
</table>

- Tested 7 days at 80 °C
- Test with Molykote® G-5511 Compound (weight change in %)
- Same compatibility with sealants as competitor’s offering
Water Resistance

- Tested 7 days at 90 °C (DIN 51807)
  Rating: 0
- Excellent water resistance
TEST DESCRIPTIONS
SRV Test

• Lubrication point: ceramic ball/plate
• Measure friction and wear under oscillating or rotating motion
• Determine the load capacity and life of lubricating films
Penetration Test

• Measure consistency of lubricating greases
• Measured variable: penetration of cone in 1/10 mm in 5 seconds
• Dependence of viscosity on rate of shear (worked penetration)
**Penetration Test (continued)**

<table>
<thead>
<tr>
<th>NLGI number</th>
<th>ASTM worked (60 strokes) penetration at 25 °C tenths of a millimetre</th>
<th>Appearance</th>
<th>Consistency food analog</th>
</tr>
</thead>
<tbody>
<tr>
<td>000</td>
<td>445-475</td>
<td>fluid</td>
<td>cooking oil</td>
</tr>
<tr>
<td>00</td>
<td>400-430</td>
<td>semi-fluid</td>
<td>apple sauce</td>
</tr>
<tr>
<td>0</td>
<td>355-385</td>
<td>very soft</td>
<td>brown mustard</td>
</tr>
<tr>
<td>1</td>
<td>310-340</td>
<td>soft</td>
<td>tomato paste</td>
</tr>
<tr>
<td>2</td>
<td>265-295</td>
<td>&quot;normal&quot; grease</td>
<td>peanut butter</td>
</tr>
<tr>
<td>3</td>
<td>220-250</td>
<td>firm</td>
<td>vegetable shortening</td>
</tr>
<tr>
<td>4</td>
<td>175-205</td>
<td>very firm</td>
<td>frozen yogurt</td>
</tr>
<tr>
<td>5</td>
<td>130-160</td>
<td>hard</td>
<td>smooth pate</td>
</tr>
<tr>
<td>6</td>
<td>85-115</td>
<td>very hard</td>
<td>cheddar cheese</td>
</tr>
</tbody>
</table>
Tack Test

• Measure the max force value
• Higher force $\rightarrow$ more tacky
Water Resistance Test

- 1 mm grease layer on a glass plate (surface of 100 x 10 mm)
- DIN-Norm 51807, 3 hours at 90 °C, up to 7 days
MOLYKOTE® G-5511
WATER TAP COMPOUND
Summary of Features and Benefits

Molykote® G-5511 Water Tap Compound

• Excellent water resistance
• Wide service temperature range (-40 to 200 °C)
• Compatible with many elastomers
• Lubrication between ceramic discs, rubber gaskets and plastic components in water taps
• Meets requirements of DIN EN 817
• Meets several global standards for drinking water contact
Molykote® brand Lubricants – Smart Lubrication™

- Family of high-performance lubricants
- Trusted and respected worldwide for more than 65 years
- Designed for optimum lubricating and energy-saving solutions
- Constantly expanded into new, innovative lubrication technologies
Molykote® brand Lubricants – Smart Lubrication™

• The most complete line of industrial lubricants and fluids available from any single supplier in the world
• Available through a global network of distributors
• Expert technical service and support
  – Internationally recognized experts in lubrication products/services
  – Lubricant Expertise Centers strategically located worldwide
Thank you!
The information contained in this communication does not constitute an offer, does not give rise to binding obligations, and is subject to change without notice to you. The creation of binding obligations will occur only if an agreement is signed by authorized representatives of Dow Corning and your company. Any reference to competitor materials contained in this communication is not an endorsement of those materials by Dow Corning or an endorsement by the competitor of Dow Corning materials.

To the fullest extent permitted by applicable law, Dow Corning disclaims any and all liability with respect to your use or reliance upon the information. **DOW CORNING DOES NOT MAKE ANY WARRANTY OR REPRESENTATION, EXPRESS OR IMPLIED, WITH RESPECT TO THE UTILITY OR COMPLETENESS OF THE INFORMATION AND DISCLAIMS THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. DOW CORNING DISCLAIMS LIABILITY FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES.**

*Dow Corning* and *Molykote* are registered trademarks of Dow Corning Corporation.
*We help you invent the future* and *Smart Lubrication* are trademarks of Dow Corning Corporation.
© 2015–2016 Dow Corning Corporation. All rights reserved.