

## LATI LATILUB 73/13-01M Polyoxymethylene Base (POM), 1% Molybdenum Disulfide Self Lubricating Plastic (Unv

Category: Polymer, Thermoplastic, Acetal (POM)

## **Material Notes:**

Description: Latilub self-lubricating plastic materials are more and more often designed to replace metals in applications such as gears, bushings, cams, slides, etc), for which, besides their intrinsic properties (moldability, low cost, lightness, high mechanical properties), low friction coefficient and low wear are required. Specific Notes for this Material: polyoxymethylene base (POM); 1% molybdenum disulfide; good wear resistance. Disclaimer from LATI: This document contains information based on average values as obtained from the results of laboratory tests and observations made on LATI materials. Tested materials were injection molded, used in their natural color, and conditioned in compliance with Standard ASTM D 618, procedure A. These values refer to LATI's best technical and scientific knowledge at the moment of testing and cannot be used as a basis for the development of applications. For a better assessment of the materials, you are kindly requested to contact LATI's technical or commercial offices, which are at your disposal and will supply detailed information on the most suitable characteristics for their intended use. With reference to DPR n.224 dated May 24, 1988, issued in accordance with EC Guidelines 85/374, LATI Industria Termoplastici S.p.A. declines all responsibility arising from an improper use of the products described in this document. All data provided by LATI.

Order this product through the following link:

http://www.lookpolymers.com/polymer\_LATI-LATILUB-7313-01M-Polyoxymethylene-Base-POM-1-Molybdenum-Disulfide-Self-Lubricating-Plastic-nbspUnv.php

| Physical Properties               | Metric      | English                   | Comments        |
|-----------------------------------|-------------|---------------------------|-----------------|
| Density                           | 1.44 g/cc   | 0.0520 lb/in <sup>3</sup> | ISO 1183        |
| Water Absorption                  | 0.15 %      | 0.15 %                    | at 23°C; ISO 62 |
| Linear Mold Shrinkage             | 0.020 cm/cm | 0.020 in/in               | LATI            |
| Linear Mold Shrinkage, Transverse | 0.020 cm/cm | 0.020 in/in               | LATI            |

| Mechanical Properties      | Metric               | English             | Comments  |
|----------------------------|----------------------|---------------------|-----------|
| Hardness, Rockwell M       | 84                   | 84                  | ASTM D785 |
| Tensile Strength, Ultimate | 65.0 MPa             | 9430 psi            | ISO 527   |
|                            | 19.0 MPa             | 2760 psi            | ISO 527   |
|                            | @Temperature 120 °C  | @Temperature 248 °F | 150 521   |
|                            | 29.0 MPa             | 4210 psi            | ISO 527   |
|                            | @Temperature 90.0 °C | @Temperature 194 °F | 130 321   |
|                            | 41.0 MPa             | 5950 psi            | ISO 527   |
|                            | @Temperature 60.0 °C | @Temperature 140 °F |           |
| Flexural Modulus           | 2.94 GPa             | 426 ksi             | ASTM D790 |



| Mechanical Properties | Metricopa             | English               | Comments    |  |
|-----------------------|-----------------------|-----------------------|-------------|--|
|                       | @Temperature 120 °C   | @Temperature 248 °F   | ASTM D790   |  |
|                       | 0.980 GPa             | 142 ksi               | ASTM D790   |  |
|                       | @Temperature 90.0 °C  | @Temperature 194 °F   | AS TIM D790 |  |
|                       | 1.70 GPa              | 247 ksi               | ASTM D790   |  |
|                       | @Temperature 60.0 °C  | @Temperature 140 °F   |             |  |
| Izod Impact, Notched  | 0.700 J/cm            | 1.31 ft-lb/in         | ASTM D256   |  |
| izoa impass, recenca  | @Temperature -40.0 °C | @Temperature -40.0 °F | ACTIVIDEO   |  |
|                       | 0.700 J/cm            | 1.31 ft-lb/in         | ASTM D256   |  |
|                       | @Temperature -20.0 °C | @Temperature -4.00 °F |             |  |
|                       | 0.800 J/cm            | 1.50 ft-lb/in         | ASTM D256   |  |
|                       | @Temperature 23.0 °C  | @Temperature 73.4 °F  |             |  |

| Thermal Properties                             | Metric             | English              | Comments            |
|--|--------------------|----------------------|---------------------|
| Deflection Temperature at 0.46 MPa<br>(66 psi) | 160 °C             | 320 °F               | ASTM D648           |
| Deflection Temperature at 1.8 MPa (264 psi)    | 112 °C             | 234 °F               | ASTM D648           |
| Vicat Softening Point                          | 152 °C             | 306 °F               | 50°C/h 50N; ISO 306 |
| Flammability, UL94                             | НВ                 | НВ                   |                     |
| Fiammability, 0L94                             | @Thickness 1.50 mm | @Thickness 0.0591 in |                     |
| Oxygen Index                                   | 18 %               | 18 %                 | ISO 4589            |

| Electrical Properties      | Metric   | English  | Comments |
|----------------------------|----------|----------|----------|
| Comparative Tracking Index | >= 600 V | >= 600 V | IEC 112  |

| Processing Properties | Metric         | English      | Comments  |
|-----------------------|----------------|--------------|---|
| Melt Temperature      | 180 - 200 °C   | 356 - 392 °F |   |
| Mold Temperature      | 70.0 - 90.0 °C | 158 - 194 °F |   |
| Drying Temperature    | 80.0 - 100 °C  | 176 - 212 °F | Temperature can be reduced when using vacuum ovens. |
| Dry Time              | >= 3 hour      | >= 3 hour    | Drying time can be reduced when using vacuum ovens. |



| Descriptive Properties              | Value  | Comments |
|-------------------------------------|--------|----------|
| Heat Resistance - Ball Test (125°C) | Υ      | IEC 335  |
| Heat Resistance - Ball Test (165°C) | N      | IEC 335  |
| Injection Speed                     | medium |          |
| Needle Burner Test                  | N      | 1.47 mm  |
|                                     | N      | 3.05 mm  |

## **Contact Songhan Plastic Technology Co.,Ltd.**

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