

Glass/Molydisulfide-Filled Polytetrafluoroethylene (GLMO-4)

GLMO-4 has good wear resistance in severe conditions and in vacuum and inert gas applications. In addition, **GLMO-4** has moderate wear resistance and low friction in water and medium friction in air.

Although **GLMO-4** has excellent extrusion resistance, it may be abrasive to soft materials. Dynamic surfaces in contact with a seal made from **GLMO-4** should have a hardness of Rc 40 or higher.

GLMO-4 is recommended for applications that require good wear resistance in liquids and humid conditions at temperatures from -320 °F to +500 °F (-196 °C to +260 °C).

Chemical Compatibility

GLMO-4 has excellent chemical compatibility. This material is compatible with most fluids and gases, except some acids, such as sulfuric, nitric and hydrofluoric acids. (For more compatibility information, request report TR-60A, or go to <http://www.balseal.com/techlib>. Select **Technical Reports**, then select **TR-60A Chemical Compatibility Guide**.)

FDA Compliance

GLMO-4 is not FDA compliant. (Request Report 50-640 for Bal Seal's definition of FDA compliant).

Mechanical Properties

The mechanical properties of **GLMO-4** at ambient temperatures are:

Tensile strength	ASTM D638	2200 psi (155 kg/cm ²)
Elongation	ASTM D638	175%

The following chart shows the wear rate of **GLMO-4** when it comes in contact with different media at various speeds and pressures.

"K" Wear Factor In ³ -min./ft-lb-hr x 10 ⁻¹⁰ ("K" Cm ³ -min./Kg-m-hr x 10 ⁻⁷)				
AIR	WATER		OIL	
Wear Rate at 50,000 P.V.	Wear Rate at 100,000 P.V.		Wear Rate at 100,000 P.V.	
Speed (75 FPM) – pressure (667 PSI)	Speed (100 FPM) – pressure (1000 PSI)	Speed (1000 FPM) – pressure (100 PSI)	Speed (100 FPM) – pressure (1000 PSI)	Speed (1000 FPM) – pressure (100 PSI)
580 x 10 ⁻¹⁰ (68.78 x 10 ⁻⁷)	11 x 10 ⁻¹⁰ (1.30 x 10 ⁻⁷)	160 x 10 ⁻¹⁰ (18.97 x 10 ⁻⁷)	2.5 x 10 ⁻¹⁰ (0.30 x 10 ⁻⁷)	16 x 10 ⁻¹⁰ (1.90 x 10 ⁻⁷)

Color

Black

Cost

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Advantages of GLMO-4

- Good extrusion resistance
- Improved creep resistance
- Moderate wear resistance
- Improved stability at high temperatures

Other Information

For additional information, please contact our Technical Sales Representative at (949) 460-2100. Bal Seal maintains a vast library of material references and testing information.

It is essential that the customer run evaluation testing under actual service conditions with a sufficient safety factor to determine if the proposed, supplied, or purchased, Bal Seal Engineering products are suitable for the intended purpose and to confirm expected results. Bal Seal Engineering makes no warranty, express or implied, regarding Bal Seal Engineering products or of the information contained herein, including but not limited to, warranties of merchantability, performance, and fitness for a particular use or purpose. Bal Seal Engineering shall not be liable for any loss or damage of any kind or nature that may result from the use of, reference to, or reliance on, the information contained herein, including, but not limited to, consequential, special (including loss of profits) direct, indirect, incidental, or similar damages, even if Bal Seal Engineering has been advised of the possibility of such damages. © 2010 R-56 (50-295) M14 Rev. C (623-13 and 623-64) 04-13-10