Injection molding:
**Lubricating tools reliably**
**New high-performance lubricant for injection molding tools**

Reliable lubrication of complex processes at high temperatures and cycle rates without flowing away - this requirement must be met by lubricants in injection molding machines in order to enable low lubrication intervals, smooth processes and a long tool life. Chemie-Technik GmbH, manufacturer of ELKALUB high-performance lubricants, is now presenting a new development specially created for this application: ELKALUB GLS 563 is a high-performance grease based on PFPE and has been developed for the lubrication of injection molding tools. It lasts longer at high temperatures and lubricates better than a competitor's special grease, which was used as a reference in comparative tests.

**Task:**
**Tools with special requirements**
The production processes for injection molding sometimes place high demands on lubricants. Because the special geometry of some workpieces can make ejection from the injection molding machine a complex process that requires several demolding directions or sub-processes. In the technically demanding tools, a wide variety of moving built-in parts, such as guide elements, slides, rotating cores, ejector bolts and pins, have to work with as little wear as possible despite high temperatures. "In order to enable the highest possible cycle rates and to protect the high-priced tools, lubricants specially tailored to these requirements are essential - conventional greases would fail in the higher temperature ranges in the long run," says Christian Hof, Technical Sales at Chemie Technik GmbH.
The product
ELKALUB GLS 563 is a high-performance grease based on PFPE (Perfluoropolyether) for temperatures of up to 250 degrees C, which is compatible with all conventional sealing materials except fluorinated sealing materials (FKM). Comparative tests with the special grease of a competitor, which the manufacturer together with the injection molding company FILPLAST S.R.L. (Romania), according to the company, have shown not only a better lubricating effect during operation at high temperatures, but also significantly better adhesion to the friction point.

Application
Injection molders often rely on their tact when it comes to lubrication and apply the lubricant by hand. Others also use brushes or rags. The ELKALUB GLS 563 supplied in a 200 g can is matched to this and can be applied evenly and in thin layers to the friction points to be lubricated.

In order to ensure optimal wetting of the surfaces, thorough pre-cleaning is recommended - preferably with a suitable cleaning agent. For this purpose, Chemie-Technik GmbH has developed the PFPE-based cleaning agent ELKALUB LFC 500.

Advantages of ELKALUB GLS 563
- Good adhesion to the friction surfaces even at higher temperatures
- Longer service intervals due to less wear
- Longer tool life
- Compatible with conventional sealing materials
- Component contamination safety even at high tool temperatures
- Suitable cleaning agent ELKALUB LFC 500 available

More about ELKALUB GLS 563
ELKALUB GLS 563 in the online product finder