

WOLPASIT SECURO FLUID

Bonded coating for guideways in machine tools



Benefits for your application

- Better sliding characteristics in the mixed friction regime
- Prevents stick-slip
- Enhances emergency running properties

Description

WOLPASIT SECURO FLUID is an air-drying inorganic bonded coating forming a lubricating layer on steel and cast iron surfaces. WOLPASIT SECURO FLUID was developed to prevent stick-slip on machine tool guideways. WOLPASIT SECURO FLUID coatings improve the sliding characteristics under boundary and mixed friction conditions. If surfaces slide along one another (even very smooth ones), the roughness peaks are in contact. As these roughness peaks determine the load-bearing area of the surfaces, the specific surface pressures and friction forces can be very high. Only when full-fluid friction is attained, the roughness peaks are separated by a lubricant film. In the boundary and mixed friction regime, surfaces with low coefficients are more likely to prevent stick-slip. The reduction of the friction coefficient is due to the fact that the solid lubricants are deposited on the friction surface, which leads to a higher load-bearing ratio. In the mixed friction regime, WOLPASIT SECURO FLUID is subject to plastic levelling. While the solid lubricant may no longer be visible on the friction surfaces after a short time, the functional layer is retained.

Application

WOLPASIT SECURO FLUID is particularly suitable for guideways in machine tools,

e.g.

- jig boring machines
- horizontal boring, drilling and milling machines

- surface grinding machines
- gear grinding machines

The effect of WOLPASIT SECURO FLUID can be further increased if high-quality guideway oils are used, e.g. LAMORA D oils. If only one of the friction surfaces is to be coated, the longer one should be chosen. However, best results are attained by coating both surfaces.

Application notes

WOLPASIT SECURO FLUID is supplied ready for use. The surfaces to be coated must be free of oil, water and corrosion. WOLPASIT SECURO FLUID can be sprayed or brushed on as a thin layer. It takes approx. 30 min. to complete its reaction. After that, the guideways should be run in dry (without oil) until a shiny, compact layer has formed. A speed of < 500 mm/min should be selected for running-in. After running-in, the coated guideways should be protected against moisture. For normal operation, the machine tool's lubricating system should be activated again.

Material safety data sheets

Material safety data sheets can be requested via our website www.klueber.com. You may also obtain them through your contact person at Klüber Lubrication.

Pack sizes	WOLPASIT SECURO FLUID
Bottle, 280 ml WH	+

Product data	WOLPASIT SECURO FLUID
Article number	100013
Colour space	grey
Lower service temperature	-40 °C / -40 °F
Upper service temperature	80 °C / 176 °F



WOLPASIT SECURO FLUID

Bonded coating for guideways in machine tools

Product data	WOLPASIT SECURO FLUID
Runout time, DIN EN ISO 2431, with flow cups, 3 mm nozzle	35 - 45 s
Density, DIN EN ISO 2811, at 20 °C	approx. 1.12 g/cm ³
Yield with a tribo-film thickness of 10 micrometer	approx. 50 m ² /l
Minimum shelf life from the date of manufacture - in a dry, frost-free place and in the unopened original container, approx.	24 months

Klüber Lubrication – your global specialist

Innovative tribological solutions are our passion. Through personal contact and consultation, we help our customers to be successful worldwide, in all industries and markets. With our ambitious technical concepts and experienced, competent staff we have been fulfilling increasingly demanding requirements by manufacturing efficient high-performance lubricants for more than 80 years.

**Klüber Lubrication München SE & Co. KG /
Geisenhausenerstraße 7 / 81379 München / Germany /
phone +49 89 7876-0 / fax +49 89 7876-333.**

The data in this document is based on our general experience and knowledge at the time of publication and is intended to give information of possible applications to a reader with technical experience. It constitutes neither an assurance of product properties nor does it release the user from the obligation of performing preliminary field tests with the product selected for a specific application. All data are guide values which depend on the lubricant's composition, the intended use and the application method. The technical values of lubricants change depending on the mechanical, dynamical, chemical and thermal loads, time and pressure. These changes may affect the function of a component. We recommend contacting us to discuss your specific application. If possible we will be pleased to provide a sample for testing on request. Klüber products are continually improved. Therefore, Klüber Lubrication reserves the right to change all the technical data in this document at any time without notice.

Publisher and Copyright: Klüber Lubrication München SE & Co. KG. Reprints, total or in part, are permitted only prior consultation with Klüber Lubrication München SE & Co. KG and if source is indicated and voucher copy is forwarded.