

## LAMORA D 68, 100, 150, 220

Lubricating oils for slideways and guideways

#### Your benefits at a glance

- Prevent residue formation and stick-slip at low sliding speeds
  - Good demulsifying behaviour towards water-miscible cooling lubricants
  - Optimised coefficients of adhesion
  - Good wetting and load-carrying capacity
- Especially for slideways and guideways coated with plastic
- Meet the requirements of CGLP oils acc. to DIN 51 502

#### Your requirements - our solution

Linear guides are expected to function precisely and to run smoothly despite being subject to many start-ups and stops. They often have to withstand vibrations and go a long time without maintenance. Slideway oils can often not be prevented from mixing with cooling lubricants containing water, which then leads to residue formation and shorter coolant life.

LAMORA D oils were especially developed for such taxing requirements. Our oils offer excellent lubricity also at low sliding speeds, enabling constant and precise feed motion of workpiece and tool slides. They ensure good wetting of the sliding surfaces and a high load-carrying capacity, especially of slideways with plastic coatings. Tests at SKC Schmidt GmbH & Co. (formerly Hans Schmidt Gleittechnik GmbH & Co.) have shown that the oils attain "good" to "very good" results both in terms of their coefficients of adhesion and their demulsifying behaviour in contact with customary cooling lubricants.

LAMORA D oils are in compliance with ISO 6743 part 13 GA and GB.

## Application

LAMORA D oils are especially suited for the lubrication of heavily loaded slideways with low feed rates. LAMORA D oils have been tried and tested for the lubrication of slideways and guideways in modern machining centres, milling machines, lathes and other machine tools. As they show good compatibility with water-miscible machining fluids and cooling lubricants, LAMORA D oils can be used in applications where they may mix with aqueous media.

### **Application notes**

LAMORA D oils can be applied by oil can or a centralised lubricating system. If you have any other questions regarding your application, our experts will be happy to help you.

### 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	LAMORA D 68	LAMORA D 100	LAMORA D 150	LAMORA D 220
Canister 500 ml				+
Canister 5 I	+			
Canister 20 I	+	+	+	+
Drum 200 l	+	+	+	+



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Characteristics	LAMORA D 68	LAMORA D 100	LAMORA D 150	LAMORA D 220
Article number	030142	030165	030166	030143
Density, DIN 51757, 20°C	approx. 0.88 g/cm <sup>3</sup>	<sup>3</sup> approx. 0.88 g/cm <sup>3</sup>	approx. 0.89 g/cm <sup>3</sup>	approx. 0.89 g/cm <sup>3</sup>
Flash point, DIN EN ISO 2592, Cleveland open cup	≥ 220 °C	≥ 220 °C	≥ 220 °C	≥ 220 °C
ISO viscosity grade, DIN ISO 3448, ISO VG	68	100	150	220
Kinematic viscosity, DIN EN ISO 3104 / DIN 51562-1 / ASTM D445 / ASTM D7042, 100°C	approx. 8.5 mm <sup>2</sup> /s	approx. 11 mm <sup>2</sup> /s	approx. 15 mm²/s	approx. 19 mm²/s
Kinematic viscosity, DIN EN ISO 3104 / DIN 51562-1 / ASTM D445 / ASTM D7042, 40°C	approx. 68 mm²/s	approx. 100 mm <sup>2</sup> /s	approx. 150 mm²/s	approx. 220 mm²/s
Viscosity index, DIN ISO 2909	approx. 96	≥ 89	≥ 94	≥ 90
Pour point, DIN ISO 3016	≤ -20 °C	≤ -12 °C	≤ -10 °C	≤ -15 °C
FZG scuffing test, DIN ISO 14635-1, A / 8.3 / 90, failure load stage	≥ 12	≥ 12	≥ 12	≥ 12
Minimum shelf life from the date of manufacture - in a dry, frost-free place and in the unopened original container, approx.	36 months	36 months	36 months	36 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 90 years.

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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.

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