OXIGENOEX® S 4

Sliding agent for oxygen installations



Description:

OXIGENOEX S 4 is a synthetic sliding agent for installations carrying gaseous oxygen. It has a good sealing effect and is practically neutral towards NBR, EPDM, FPM and PTFE materials. Owing to the vast number of elastomer compounds, we recommend testing product resistance prior to series applications.

Its wide service temperature range makes this product suitable for universal applications.

The German Institute for Materials Research and Testing (BAM) does not have any safety-related concerns in context with gaseous oxygen at operating temperatures up to 60 °C and oxygen pressures up to 60 bar.

Application:

OXIGENOEX S 4 is suitable as a sliding agent for all friction points in oxygen valves, hose couplings in oxygen lines, medical oxygen equipment, plain and rolling bearings exposed to oxygen (C:P > 40), diving equipment and as assembly aid for rubber-elastic materials, such as O-rings.

Application notes:

Prior to the first application, clean all friction points with white spirit 180/210 and then with Klüberalfa XZ 3-1. Afterwards blow the friction points carefully with clean, dry compressed air or hot air in order to remove all white spirit residues.

Remove all sliding agent residues with Klüberalfa XZ 3-1 before re-applying the product.

The application point has to be bright (i.e. there must not be any oil, grease or traces of perspiration) and free from contaminating particles. The application process must also be "oxygen-clean" because this is

the only way to ensure a "ready for oxygen service" condition.

We recommend contacting our application engineers to ensure maximum service life. OXIGENOEX S 4 is supplied as a standard product based on the characteristics listed in this product information leaflet, the data sheet and the EU materials safety data sheet.

Minimum shelf life:

The minimum shelf life is approx 36 months if the product is stored in the original closed container in a dry place.

Pack sizes:

0.125 kg glass jar 0.75 kg can

OXIGENOEX S 4

- Sliding agent for gaseous oxygen installations
- Upper oxygen pressure limit at operating temperatures up to 60 °C, 60 bar
- Service temperature range:
 - with oxygen-enriched gases > 21 percent by volume:
 - 40 °C to 60 °C
 - with O₂ portion
 - ≤ 21 percent by volume:
 - 40 °C to 160 °C
- Suitable for many materials

Product data:

Service temperature range* a) oxygen-enriched gases, > 21% by volume of O ₂ , °C b) oxygen portion ≤ 21% by volume, °C	– 40 to 60 – 40 to 160
Colour	whitish, cream
Texture	homogeneous, fibred
Density, DIN 51 757, at 20 °C, g/cm ³ , approx.	1.55
Drop point, DIN ISO 2176, °C	> 250
Worked penetration, DIN ISO 2137, at 25 °C; 0.1 mm	220 – 250
Copper corrosion, DIN 51 811, after 24 h / 100 °C, corrosion rating	1 – 100
Oxygen pressure limit at 60 °C, bar	60
BAM test, log no.	9381/95 II-4644

^{*} The indicated service temperatures are guide values depending on the lubricant's structure, the intended use and the method of application.

This product information leaflet should provide the reader with information for initial product selection. It constitutes neither an assurance of the product properties nor does it release the user from the obligation of performing preliminary tests with the selected lubricant. Klüber will make samples available for test purposes upon request.



The data in this product information is based on our general experience and knowledge at the time of printing 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 tests with the selected product. We recommend contacting our Technical Consulting Staff to discuss your specific application. If required and possible we will be pleased to provide a sample for testing. Klüber products are continually improved. Therefore, Klüber Lubrication reserves the right to change all the technical data in this product information at any time without notice.



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