

# Klüberalfa YVI 93-152

Inert and vacuum grease with low gasification



## Benefits for your application

- **Long component life possible**
  - over a wide service temperature range
  - when exposed to aggressive chemical agents or high vacuum
  - in contact with sensitive sealing materials
- **High component performance**
  - due to low friction values in sliding contact
  - due to reduced stick-slip tendency
  - due to low gasification, no VOC emission

## Description

Klüberalfa YVI 93-152 is a white, long-term lubricating grease which is neutral in odour and offers excellent stability to chemical agents.

No silicones or hydrocarbon raw materials are used for the manufacture of this product. No detrimental effects are to be expected due to VOC or silicone emissions.

Klüberalfa YVI 93-152 is NSF H1 registered and therefore complies with FDA 21 CFR § 178.3570. The lubricant was developed for incidental contact with products and packaging materials in the food-processing, cosmetics, pharmaceutical or animal feed industries. The use of Klüberalfa YVI 93-152 can contribute to increase reliability of your production processes. We nevertheless recommend conducting an additional risk analysis, e.g. HACCP.

## Application

Klüberalfa YVI 93-152 is suitable for bearings, seals and guides subject to aggressive media, such as in precision engineering, optical industry, automatic laboratory equipment.

Klüberalfa YVI 93-152 is preferably used for applications where a chemical reaction between the lubricant and synthetic materials is to be prevented in order to exclude contamination caused by secondary reaction products. Possible applications are the sealing of flanged joints in distillation plants or the lubrication and sealing of ground glass joints in the chemical and pharmaceutical industries.

Due to the low vapour pressure of the base oil Klüberalfa YVI 93-152 can also be used for high vacuum and clean room production.

The flat temperature-viscosity curve and the low dynamic viscosity of the base oil ensure constant friction values over a wide temperature range.

## Application notes

For optimum lubrication results, we recommend cleaning the friction points with white spirit 180/210 and then Klüberalfa XZ 3-1. Upon cleaning apply clean dry compressed air or hot air to remove any remaining white spirit residues.

For initial lubrication, the friction point must be clean and bright (i.e. free from oil, grease or perspiration) and free from particles. The various technical sales departments at Klüber Lubrication may be contacted at any time to ensure optimum results with this special lubricating grease.

## Material safety data sheets

Material safety data sheets can be requested via our website [www.klueber.com](http://www.klueber.com). You may also obtain them through your contact person at Klüber Lubrication.

### Pack sizes

Can 1 kg

### Klüberalfa YVI 93-152

+



# Klüberalfa YVI 93-152

Inert and vacuum grease with low gasification

Product data	Klüberalfa YVI 93-152
Article number	090076
NSF-H1 registration	145 156
Chemical composition, type of oil	PFPE
Chemical composition, solid lubricant	PTFE
Lower service temperature	-60 °C / -76 °F
Upper service temperature	200 °C / 392 °F
Colour space	white
Density at 20 °C	approx. 1.90 g/cm <sup>3</sup>
NLGI grade, DIN 51818	2
Shear viscosity at 25 °C, shear rate 300 s <sup>-1</sup> , equipment: rotational viscometer, lower limit value	3 000 mPas
Shear viscosity at 25 °C, shear rate 300 s <sup>-1</sup> , equipment: rotational viscometer, upper limit value	6 000 mPas
Kinematic viscosity of the base oil, DIN 51562 pt. 01/ASTM D-445/ASTM D 7042, 40 °C	approx. 150 mm <sup>2</sup> /s
Kinematic viscosity of the base oil, DIN 51562 pt. 01/ASTM D-445/ASTM D 7042, 100 °C	approx. 40 mm <sup>2</sup> /s
Flow pressure of lubricating greases, DIN 51805, test temperature: -60 °C	<= 1 400 mbar
Minimum shelf life from the date of manufacture - in a dry, frost-free place and in the unopened original container, approx.	60 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.