

## BARRIERTA I S, I MI, I EL, O Fluid

High-temperature lubricating fluids



#### Your benefits at a glance

- Extended service life possible due to
  - · excellent thermal stability
  - low evaporation rates
- Wide application range due to
  - availability in four viscosity grades
  - o compatibility with a wide range of plastics and elastomer materials

### Your requirements - our solution

BARRIERTA is Europe's oldest high-quality brand of hightemperature lubricants based on perfluorinated polyether oil (PFPE).

The name of BARRIERTA is widely regarded as synonymous with long-term stability and thermal resistance. BARRIERTA products are among the most widely used PFPE lubricants today.

BARRIERTA Fluids are based on highly refined PFPE oils. Thanks to their excellent thermal stability and availability in four different viscosity grades, BARRIERTA Fluids have proven successful for many years in a large variety of applications.

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

#### **Application**

Bearings and guides

BARRIERTA Fluids attain long service lives in rolling bearings, plain bearings, sintered metal bearings and guides subject to extreme temperatures or aggressive chemicals.

Owing to their low vapour pressures, and depending on the viscosity grade, BARRIERTA Fluids are also suitable for high-vacuum applications.

Electrical contacts

BARRIERTA Fluids offer long-term protection against wear on electrical contacts, especially those with gold surfaces. There are no known decomposition products that would have an insulating effect on the contacts.

Chains

BARRIERTA I S Fluid is suitable for the lubrication of hightemperature chains and even meets stringent hygiene requirements. BARRIERTA IS Fluid is non-toxic and non-odorous.

Plastic-plastic friction points

BARRIERTA Fluids are generally regarded as neutral towards elastomers and plastics (possible exception: perfluorinated rubber). A negative impact on materials is not to be expected. Nevertheless, we recommend testing the lubricant's compatibility with the materials in question prior to series application.

## **Application notes**

We recommend cleaning all parts to operate in contact with the lubricant with white spirit 180/210 and/or Klüberalfa XZ 3-1. Upon cleaning, apply clean compressed air or hot air to remove any residues. The friction point should be clean and bright (i.e. free from oil, grease or perspiration) and free from contamination particles to ensure optimum function.

#### 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.





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High-temperature lubricating fluids



Pack sizes	BARRIERTA I S FLUID	BARRIERTA I MI FLUID	BARRIERTA I EL FLUID	BARRIERTA 0 FLUID
Canister 500 ml	+	+	+	+
Canister 10 I	+	+	+	+

Characteristics	BARRIERTA I S FLUID	BARRIERTA I MI FLUID	BARRIERTA I EL FLUID	BARRIERTA 0 FLUID
Article number	090004	090003	090002	090001
Composition, type of oil	PFPE	PFPE	PFPE	PFPE
Appearance	clear	clear	clear	clear
Colour space	colourless	colourless	colourless	colourless
Service temperature, lower limit	-25 °C	-25 °C	-40 °C	-60 °C
Service temperature, upper limit	260 °C	220 °C	180 °C	100 °C
NSF H1 registration number	136762			
Density, DIN 51757, 20°C	approx. 1.91 g/cm <sup>3</sup>	approx. 1.9 g/cm <sup>3</sup>	approx. 1.9 g/cm <sup>3</sup>	approx. 1.88 g/cm <sup>3</sup>
Kinematic viscosity, DIN EN ISO 3104 / DIN 51562-1 / ASTM D445 / ASTM D7042, 100°C	approx. 43 mm <sup>2</sup> /s	approx. 22 mm <sup>2</sup> /s	approx. 12 mm <sup>2</sup> /s	approx. 4.5 mm <sup>2</sup> /s
Kinematic viscosity, DIN EN ISO 3104 / DIN 51562-1 / ASTM D445 / ASTM D7042, 40°C	approx. 425 mm <sup>2</sup> /s	approx. 205 mm <sup>2</sup> /s	approx. 98 mm <sup>2</sup> /s	approx. 28 mm <sup>2</sup> /s
Viscosity index, DIN ISO 2909	≥ 120	≥ 120	≥ 100	≥ 75
Pour point, DIN ISO 3016	≤ -30 °C	≤ -30 °C	≤ -45 °C	≤ -60 °C
Minimum shelf life from the date of manufacture - in a dry, frost-free place and in the unopened original container, approx.	60 months	60 months	60 months	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 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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