

# Klübertherm NHT1 1-29

Heat transfer fluid for food-processing, pharmaceutical and industrial applications

## Your benefits at a glance

- Extended oil change intervals achievable due to highly refined base oil
- Reduced maintenance efforts and dependable operation due to excellent thermal stability
- Increased heat transfer efficiency
- High process reliability due to NSF HT1 registration
- Low residue formation thanks to the chemical stability and oxidation resistance

## Your requirements - our solution

As a user of heat transfer systems, you have high requirements in terms of process reliability and operational safety. Therefore, choosing the appropriate heat transfer fluid is of the utmost importance. Klübertherm NHT1 1-29 is an efficient heat transfer fluid for closed systems, which meets the highest requirements in terms of thermal stability.

Klübertherm NHT1 1-29 is based on highly refined hydrocarbons avoiding impurities that can occur in mineral oils. These impurities can initiate degradation of the oil and form carbon buildup on heater surfaces. Therefore, the high purification level increases thermal stability and reduces fouling of the oil. Consequently, Klübertherm NHT1 1-29 allows you to reduce maintenance activities and extended oil change intervals can be achieved.

Unlike standard mineral oils, Klübertherm NHT1 1-29 contains highly refined hydrotreated heavy paraffins to achieve high thermal stability. Klübertherm NHT1 1-29 also stands out for its low vapour pressure and high oxidation stability. Therefore, Klübertherm NHT1 1-29 contributes significantly to the reduction of maintenance costs and the extension of drainage intervals.

## Application

Klübertherm NHT1 1-29 is exclusively recommended as a closed-loop heat transfer fluid.

Thanks to its in addition NSF HT1 registration, Klübertherm NHT1 1-29 is suitable for use as heat transfer fluid in various industries such as food and pharmaceutical industries, wood panel, textiles, chemical, automotive, asphalt, cement, etc.

## Application notes

Klübertherm NHT1 1-29 can be applied in new systems without prior cleaning, except when required for reasons of product quality. Residues of varnishes, oils and others from the system installation are usually not enough to affect the fluid lifetime.

Klübertherm NHT1 1-29 is compatible with common mineral based heat transfer fluids.

The start-up procedure or cleaning process should be done in compliance with the documentation of the manufacturer of the heat transfer system. In the presence of inert gas, the operating time of this fluid may be considerably extended.

It is highly recommended to analyse the oil every 6 months to allow a reliable and efficient operation of your heat transfer system.

In case of any question, we are looking forward to hearing from you.

## 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       | Klübertherm NHT1 1-29 |
|------------------|-----------------------|
| Drum 200 l       | +                     |
| Container 1000 l | +                     |

# Klübertherm NHT1 1-29

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| Characteristics                                                                                      | Klübertherm NHT1 1-29           |
|------------------------------------------------------------------------------------------------------|---------------------------------|
| Article number                                                                                       | 029119                          |
| Composition, type of oil                                                                             | hydrotreated mineral oil        |
| Maximum film temperature                                                                             | 338 °C                          |
| Minimum Operating Temperature, 20 mPas                                                               | 44 °C                           |
| Minimum Start-up Temperature, 300 mPas                                                               | -1 °C                           |
| Service temperature, upper limit                                                                     | 327 °C                          |
| NSF H1, HT1 registration number                                                                      | registration process ongoing    |
| Density, DIN 51757, 15.6°C                                                                           | approx. 0.875 g/cm <sup>3</sup> |
| Flash point, DIN EN ISO 2592, Cleveland open cup                                                     | ≥ 200 °C                        |
| Kinematic viscosity, DIN EN ISO 3104 / DIN 53000-1, based on standard / ASTM D445 / ASTM D7042, 40°C | approx. 29 mm <sup>2</sup> /s   |

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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 95 years.

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