

# **FM GREASE HD Series**

# Specialty semi-synthetic heavy-duty greases for food and beverage processing equipment

## **Performance Features**

- · Good wash out resistance to hot and cold water
- Good oxidation and mechanical stability
- Good corrosion prevention characteristics
- · Good adhesive properties
- Neutral odour and taste



## **Certifications and Specifications**

- NSF H1
- NSF ISO 21469
- Kosher
- Halal

#### Description

FM GREASE HD 1.5 and 2 are heavy-duty lubricants specially developed for the grease lubrication of machinery where frequent changes and re-applications of the grease charge are required, such as machines used to process pet food and animal feed. It is based on a modified aluminium complex thickener, careful blend of base fluids and selected additives chosen for their ability to meet the stringent requirements of the food and beverage industry. Certified by NSF for ISO 21469 and registered by NSF (Class H1) for use where there is potential for incidental food contact. Produced according to FLT Quality Standards, in facilities where HACCP audit and Good Manufacturing Practice have been implemented and form part of the quality and hygiene management systems ISO 9001 and ISO

FUCHS LUBRITECH GMBH www.fuchs.com/lubritech info@fuchs-lubritech.de Headquarters Kaiserslautern Werner-Heisenberg-Str. 1 67661 Kaiserslautern/ Germany Phone: +49 (0) 6301 3206-0 FLT Oberflächentechnik Königsbergerstr. 2a 85386 Eching/ Germany Phone: +49 (0) 89 32710-5 Graphitprodukte Dohna Braugasse 1 01806 Dohna/ Germany Phone: +49 (0) 3529 5646-30

FM GREASE HD 2 | 1000813-2 | 2016-10-26 | 1 / 3



21469.

#### **Applications**

• Recommended for use in machinery where frequent changes of the grease charge are required or there is high product consumption rate

- · Slow and medium speed plain and rolling element bearings
- · Heavy-loaded and shock-loaded applications
- · Joints, linkages and slides
- Overhead track systems
- · May also be used as protective antitrust film and as release agent on gaskets and seals of tank closures

#### Seal and Paint Compatibility

Compatible with the elastomers, gaskets, seals and paints normally used in food machinery lubrication systems.

#### Handling and Storage

All food grade lubricants should be stored separately from other lubricants, chemical substances and foodstuffs and out of direct sunlight or other heat sources. Store between 0  $^{\circ}$ C and +40  $^{\circ}$ C. Provided that the product has been stored under these conditions we recommend that the product be used within 3 years from the date of manufacture. Upon opening a pack, the product must be used within 2 years (or within 3 years of date of manufacture, whichever is the sooner).

FUCHS LUBRITECH GMBH www.fuchs.com/lubritech info@fuchs-lubritech.de Headquarters Kaiserslautern Werner-Heisenberg-Str. 1 67661 Kaiserslautern/ Germany Phone: +49 (0) 6301 3206-0 FM GREASE HD 2 | 1000813-2 | 2016-10-26 | 2 / 3

**FLT Oberflächentechnik** Königsbergerstr. 2a 85386 Eching/ Germany Phone: +49 (0) 89 32710-5 **Graphitprodukte Dohna** Braugasse 1 01806 Dohna/ Germany Phone: +49 (0) 3529 5646-30



#### **Technical Data: FM GREASE**

Characteristics	<u>HD 1.5</u>	<u>HD 2</u>	<u>Unit</u>	Test Method
NSF Reg. No.	145791	144718		
Colour	Off-white	Off-white		
Structure	Tacky paste	Tacky paste		
NLGI grade	1,5	2		DIN 51818
Type of thickener	Modified aluminium complex	Modified aluminium complex		
Worked penetration [+25 °C]	300 - 320	265 - 295	1/10 mm	ISO 2137
Kin. Visc. (base oil) at +40 °C	550	550	mm²/s	ISO 3104
Kin. Visc. (base oil) at +100 °C	37,8	37,8	mm²/s	ISO 3104
Dropping point	>240	>240	°C	ISO 2176
Operating temperatures	-10 to +140	-10 to +140	°C	LLS 134
short-term peak	+150	+150	°C	
Pumpability				Safematic*
+30 ℃		72/72**	m	
+20 ℃		72/72**	m	
+10 °C		72/72**	m	
+0 °C		54/66**	m	
-10 ℃		18/42**	m	
-20 °C		6/6**	m	
Classification DIN	KP 1,5 N-10	KP 2 N-10		DIN 51502
Classification ISO	L-XADEB 1,5	L-XADEB 2		ISO 6743-9

\* increase to 130 bar / decrease to 50 bar of the grease in a 72m centralised lubricating system

\*\* achieved length at lines with 22/28 mm diameter

LLS = LUBRITECH Laboratory Specification

Typical for current production. Variations in these characteristics may occur.

As far as we know this information reflects the current state of knowledge and our research. It cannot, however, be taken as an assurance about the properties nor as a guarantee of the suitability of the product for the individual case in point. Before using our products the purchaser must, therefore, check their suitability and be satisfied that the output will be satisfactory. Our products undergo continuous improvement. We therefore retain the right to change our product program, the products, and their manufacturing processes as well as all details of our product information sheets at any time and without prior announcement, unless otherwise provided in customer-specific agreements. With the publication of this product information sheet, all previous editions cease to be valid.

We are specialized in developing products for extreme tribological problems in cooperation with end users. FUCHS LUBRITECH provides service and individual advice. Please contact us! E-Mail: info@fuchs-lubritech.de

FUCHS LUBRITECH GMBH www.fuchs.com/lubritech info@fuchs-lubritech.de Headquarters Kaiserslautern Werner-Heisenberg-Str. 1 67661 Kaiserslautern/ Germany Phone: +49 (0) 6301 3206-0 FM GREASE HD 2 | 1000813-2 | 2016-10-26 | 3 / 3

**FLT Oberflächentechnik** Königsbergerstr. 2a 85386 Eching/ Germany Phone: +49 (0) 89 32710-5 **Graphitprodukte Dohna** Braugasse 1 01806 Dohna/ Germany Phone: +49 (0) 3529 5646-30