

ROTHEN FETT ALM HD2 **Grease for severe applications** **in the food industry**



Nonfood Compounds
Program Listed H1
Registration #143968

DESCRIPTION

ROTHEN FETT ALM HD2 is a product suitable for severe use, intended for the lubrication of machinery used in food industries, where requests are frequent for re-greasing and re-lubrication, as in the case of machinery employed to prepare animals' food.

This grease is constituted by a complex modified aluminum-based thickener, selected base oils and additives chosen for their ability to meet the stringent requirements of the animal feeding industry.

This product only contains approved substances for lubricants which may incur in incidental food contact, as approved by the U.S. 21 CFR 178.3570, 178.3620 and 182 .

ROTHEN FETT ALM HD2 also meets the U.S. Department of Agriculture Food Safety and Inspection Service (USDA) for H1 previous guidelines (from year 1998).

APPLICATION

- This product is recommended for use with machinery requiring frequent grease change, or exposed to a high rate of employment's consumption;
- Plain and rolling bearings of low and medium speed;
- Applications with high and impulsive loads;
- Joints, couplings and slides;
- Guides for suspended loads;
- **ROTHEN FETT ALM HD2** can also be used as a protective film against rust and as an unblocking agent for sealed tanks.

PROPERTIES

- Good resistance to hot and cold water washouts;
- Good mechanical and oxidative stability;
- Good anti-corrosion characteristics;
- Good adhesive properties;
- Neutral smell and taste;
- Does not contain natural products derived from nuts in shell and genetically modified organisms (GMOs).

ROTHEN FETT ALM HD2 is compatible with elastomers, gaskets, seals and paints normally used in lubrication systems of machinery for the food industry.

ACCIDENTAL CONTACT WITH FOOD:

ROTHEN FETT ALM HD2 meets the USDA H1 Class (1998) requirements for lubricants which may incidentally come into contact with food.

The product contains only substances approved by the U.S. FDA Title 21 CFR 178.3570, 178.3620 and / or substances defined as safe (U.S. 21 CFR 182) for lubricants employed in the food industry.

To comply with the requirements of U.S. 21 CFR 178.3570, contact with food should be avoided as much as possible. However, in case of accidental contact, the concentration of the product shall not exceed 10 parts per million (10 mg / kg of food).

In locations and / or applications where the local legislation does not specify the maximal concentration limits, **Rothen** recommends to observe the same 10 ppm limit, because up to this concentration, the product does not impact negatively on the food's taste, odor or color and does not present a risk to health. **ROTHEN FETT HD2 ALM** can be used in machines that process food for human or animal consumption both . In order to be consistent with good manufacturing practice, the employed amount should be the

minimum necessary to achieve the desired technical effect. It is necessary to take corrective action if a high rate of contact with food is detected.

HEALTH AND SAFETY:

From the information available, **ROTHEN FETT ALM HD2** poses no risk to health and safety when properly employed in the recommended doses and in accordance with proper industrial and personal hygiene practices.

Avoid repeated contact with skin. Pay particular attention when handling the waste oils. For more information, consult the Security Sheet.

ENVIRONMENTAL PROTECTION:

Please return used and empty lubricants' containers to an authorized collection point. Do not discharge into sewers, soil or water.

HANDLING AND STORAGE:

Lubricants for food employment such as **ROTHEN FETT ALM HD2** should be stored separately from other lubricants, chemicals products or foods. Store it in a dry and well ventilated place. Avoid direct sunlight and sources of heat exposure. Store between 0 and 40 ° C. When stored according to the given suggestions, it is recommended to use the product within 5 years from the date of manufacture. Before opening the package, please make sure to be in a clean environment, clean the container with drinking water, and dry it with a clean cloth. Record the date of seal's opening. To prevent product's contamination, always close the package after use. After his first opening, the product should be finished within 2 years (or 5 from the date of production, whichever expires first).

TYPICAL PHYSICAL-CHEMICAL CHARACTERISTICS: (*)

FEATURE	METHODS	OUTCOME
Aspect		Adhesive White Paste
Soap		Complex Modified Alluminium
Worked penetration at 25°C (0,1 mm)	ISO 2137	265 – 295
NLGI Consistence	DIN 51818	2
Base Oil's Kinematic viscosity: 40°C cSt 100°C cSt	ISO 3104	550 37,8
Dripping point °C	ISO 2176	>240
Operative temperature		From -10°C to +140°C
Maximum Operative temperature		Up to +150°C
Standard classification	DIN 51524 ISO 6743/9	KP2N-10 L-XADEB 2

(*)The values are based on typical production, and may consequently vary.