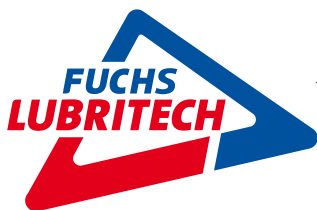
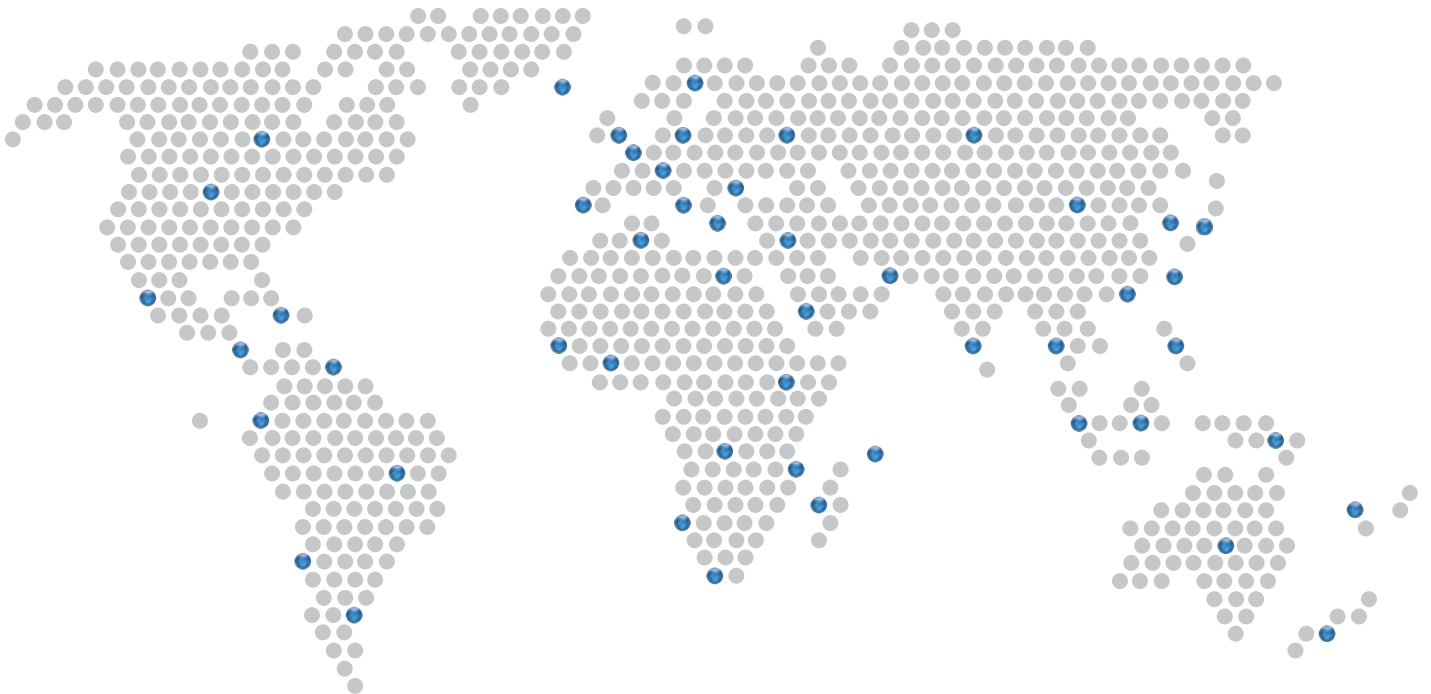




## PRODUCT CATALOGUE







## FUCHS LUBRITECH – The Global Expert in Special Lubricants

The production of food grade lubricants has been one of the core competencies of FUCHS LUBRITECH GmbH for decades. After adding the new CASSIDA product portfolio to our production programme, we now offer what appears to be the most comprehensive range of lubricants for all application domains in the food and beverage industries as well as related fields of application. FUCHS LUBRITECH, headquartered in Kaiserslautern (Germany), is an independent unit with roots in FUCHS PETROLUB AG, the largest independent manufacturer of lubricants worldwide.

Today FUCHS PETROLUB AG, which was founded as a family business in Mannheim (Germany) in 1931, is a company with global reach. FUCHS PETROLUB and the FUCHS LUBRITECH Group with their numerous subsidiaries and sales partners offer global availability of the CASSIDA range of food grade lubricants as well as the complete portfolio of FUCHS and FUCHS LUBRITECH lubricants for practically all conceivable areas of use.

FUCHS LUBRITECH is one of the worldwide leading manufacturers of special lubricants and release agents for all areas of industrial use, from the automotive industry and the construction industry to mechanical engineering and farming. Our programme comprises concrete release agents, adhesive lubricants, lubricating fluids and greases, pastes, anti-friction coatings, sprays, glass processing media, as well as forming lubricants – a total of more than 1,000 specialised products matched exactly to the respective purpose of use. Environmental protection, work safety, and user safety enjoy our highest priority not only during production, but already during research and development.

Our unique concentration on the development and production of lubricants, coupled with an above-average rate of innovation, is one of the greatest strengths of the FUCHS LUBRITECH Group. In all our endeavours, our main focus is always on the needs and individual requirements of our customers.



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ABC2 -  
202001

Línia 6  
ABC1 -  
201901

www.pfizer.com

## Our Most Important Product: Individual Consulting and Service

We set standards not only with our high-performance products, but also with our exceptional service! This includes providing advice on how to optimise the use of food grade lubricants taking into account stringent QA management procedures in order to avoid food contamination (in accordance with HACCP = Hazard Analysis and Critical Control Points), examination of used lubricants, development of lubrication and maintenance schedules, support in changing lubricants, active support for practical testing, careful documentation of all measures, and much more.

Finding comprehensive, sustainable, and safe solutions for all tribological issues arising from our customers' requirements and their applications is our declared aspiration, standard, and goal. Customer seminars and training sessions held globally complete our service programme.

With its competent technical advice and widespread sales network, our global Food Division team supports you in your production and processing activities to ensure that you will always achieve optimal results.

## CASSIDA in the Food Industry

The highest safety standards for food, optimal productivity, and smooth operation are indispensable for economic success and for a reliable reputation.

Our customers benefit from the excellent quality of the CASSIDA portfolio, which has been confirmed by numerous OEM approvals by well-known manufacturers of production and manufacturing equipment. From hydraulic systems and transmissions to bearings and compressors: Close co-operation already during the development phase pays off for our customers!

All lubricants for the production, processing, and packaging of food, beverages, medications, and cosmetic products must fulfil stringent requirements. Consumer protection is crucial, which is why food safety is very important in all aspects of development, production, sales, and after-sales service. This is the reason why all of our food grade lubricants are registered by NSF International in accordance with the respective food-related categories.

Furthermore, our manufacturing plant in Kaiserslautern as well as the food grade lubricants produced there are certified in accordance with the international standard ISO 21469. This standard determines the hygienic requirements for the composition, manufacturing, and use of lubricants that may have incidental contact with food products – meaning that our products fulfil the highest possible safety standard.

In addition, our CASSIDA products fulfil the strict requirements of both Jewish and Muslim laws and regulations. The respective Kosher and Halal certificates document that we guarantee the highest possible level of product and food safety in this respect.

NSF registered  
ISO certified



Nonfood Compounds  
Program Listed  
ISO 21469 certified

Kosher certified



Halal certified





## At a Glance!

Being one of our core competencies, food grade lubricants are assigned a special brand in our product portfolio: CASSIDA food grade lubricants. This brand stands for the entire range of high-performance lubricants for the food and beverage industries. Under this joint umbrella, you will find fully synthetic as well as semi-synthetic and white oil based products. Their composition is always optimised to ensure optimum suitability for their respective application.

This product catalogue introduces our product portfolio and gives a comprehensive overview of the wide range of services offered by the current CASSIDA prod-

ucts. It is divided into the subcategories CASSIDA Fluids (fully synthetic), CASSIDA Greases (fully synthetic), and FM Lubricants (white oil based resp. semi-synthetic).

Should you be unable to find a product or have any questions, our Food Division team or your local sales partner will be happy to assist you. You will receive individual, competent advice and recommendations for products that are best suited for fulfilling your particular requirements.

## Guide to Symbols



Bearings



Extreme Pressure



High Temperature



Low Temperature



Can Seamers  
and Sterilisers



Chains  
and Conveyors



Compressors



Direct Food Contact



Gears - enclosed



Gears - open



Industrial Coolants



Heat Transfer



Hydraulics



Valves, Taps  
and Fittings



Slideways



Linkages, Pins



Sugar Dissolving



Vacuum Pumps



Maintenance Spray



Mounting/Assembling/  
Disassembling Aid



Maintenance Aid



Worm Gears



NSF registered

● The information contained in this brochure corresponds to our current state of knowledge. It is intended to provide information about possible uses, but not to assure specific properties or guarantee the suitability of our products for each single case. Prior to using our products, we recommend that professional users check whether they are suitable for their purpose and assure themselves that the performance of the selected product is satisfactory. Depending on how they are used, lubricants will change their technical values. We therefore always recommend individual consultation. Since our products are being continually evolved, we reserve the right to change any information contained in this brochure at any time and without prior announcement.

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## CASSIDA FLUIDS

### CHAIN OILS

#### CASSIDA CHAIN OIL | 150 | 320 Spray | 1500 | 1500 Spray | 5000 Spray



Fully synthetic, very high-performance chain oils. Highly resistant to fling-off or wash-off. Excellent protection against wear and corrosion.

**Main application:** Lubrication of drive and transport chains in the food industry. Can be applied by brush, via bath, automatic lubrication systems or spraying.

\*after evaporation of solvent

	Typical Viscosity at 40°C [mm <sup>2</sup> /s]	Typical Viscosity at 100°C [mm <sup>2</sup> /s]
CASSIDA CHAIN OIL 150	150	19
CASSIDA CHAIN OIL 320 Spray	320*	34*
CASSIDA CHAIN OIL 1500	1500	135
CASSIDA CHAIN OIL 1500 Spray	1500*	135*
CASSIDA CHAIN OIL 5000 Spray	5000*	350*

#### CASSIDA CHAIN OIL LT | LT Spray



Fully synthetic, high-performance anti-wear chain oil suitable for a wide range of temperatures, including sub-zero conditions.

**Main application:** Transport mechanisms inside food freezers such as spiral freezers. Lubrication of metal-metal and metal-ceramic contact points in open machinery, such as slideways and chains. Plain and anti-friction bearings.

\*after evaporation of solvent

	Typical Viscosity at 40°C [mm <sup>2</sup> /s]	Typical Viscosity at 100°C [mm <sup>2</sup> /s]
CASSIDA CHAIN OIL LT	32	6.5
CASSIDA CHAIN OIL LT Spray	32*	6.5*

#### CASSIDA CHAIN OIL SP



Fully synthetic, high-performance, anti-wear chain oil with excellent creeping and penetrating features.

**Main application:** Drive and transport chains in the food industry, slideways, levers, joints and bolts, ropes, spindles and guide pulleys. Also intended for use in equipment for manufacturing food packaging.

\*after evaporation of solvent

	Typical Viscosity at 40°C [mm <sup>2</sup> /s]	Typical Viscosity at 40°C [mm <sup>2</sup> /s]
CASSIDA CHAIN OIL SP	85	460*

#### CASSIDA CHAIN OIL HTE



Fully synthetic, ester-based, high-temperature chain lubricant suitable for temperatures up to 240 °C.

**Main application:** Drive and transport chains in the food industry. Also intended for use in equipment for manufacturing food packaging.

	Typical Viscosity at 40°C [mm <sup>2</sup> /s]	Typical Viscosity at 100°C [mm <sup>2</sup> /s]
CASSIDA CHAIN OIL HTE	220	20

## CASSIDA CHAIN OIL HTX

Fully synthetic, extreme-temperature chain lubricant suitable for temperatures up to 300 °C.

**Main application:** Drive and transport chains in the food industry (e.g. bakeries). Also intended for use in equipment for manufacturing food packaging.



	Typical Viscosity at 40°C [mm <sup>2</sup> /s]	Typical Viscosity at 100°C [mm <sup>2</sup> /s]
CASSIDA CHAIN OIL HTX	330	40

## COMPRESSOR FLUIDS

### CASSIDA FLUID CR 32 | 46 | 68 | 100 | 150

Fully synthetic, very high-performance, long-life compressor oils. Meet DIN 51524 HLP and ISO 6743-3A specifications.

**Main application:** Oil-flooded rotary vane and screw air compressors in food processing plants.



	Typical Viscosity at 40°C [mm <sup>2</sup> /s]	Typical Viscosity at 100°C [mm <sup>2</sup> /s]
CASSIDA FLUID CR 32	32	6.1
CASSIDA FLUID CR 46	46	8.0
CASSIDA FLUID CR 68	68	11
CASSIDA FLUID CR 100	100	14
CASSIDA FLUID CR 150	150	19

### CASSIDA FLUID RF 46 | 68

Fully synthetic lubricants for refrigeration compressors used in the food industry.

**Main application:** Recommended for use in open- and semi-open compressors, both screw and reciprocating types. Designed for applications with ammonia (R717), offering excellent performance under high and low evaporation temperatures. Can also be used with halogenated hydrocarbons (R22) and isobutane (R600a).



	Typical Viscosity at 40°C [mm <sup>2</sup> /s]	Typical Viscosity at 100°C [mm <sup>2</sup> /s]
CASSIDA FLUID RF 46	46	7.8
CASSIDA FLUID RF 68	68	9.7

## DIRECT CONTACT AND HEAT TRANSFER FLUIDS

### CASSIDA FLUID DC 20 | 32

Fully synthetic, multi-purpose, low-volatility fluids suitable for both direct and incidental food contact applications. Can handle a wide range of application temperatures and have excellent thermal and oxidative stability to minimise cracking and promote long service life.

**Main application:** In absorber oil columns designed to remove traces of hexane from steam / air / hexane mixtures. As forming oil for the manufacture of both two- and three-piece cans for the food and beverage industry. In closed circuit and pressureless heat transfer systems with a bulk oil temperature of approximately -30 °C to 280 °C where direct food contact may occur.



	Typical Viscosity at 40°C [mm <sup>2</sup> /s]	Typical Viscosity at 100°C [mm <sup>2</sup> /s]
CASSIDA FLUID DC 20	23	4.8
CASSIDA FLUID DC 32	32	6

## CASSIDA FLUIDS

### GEAR FLUIDS

#### CASSIDA FLUID GL 150 | 220 | 320 | 460 | 680

Fully synthetic, very high-performance, long-life, anti-wear gear oils. Meet DIN 51516 CLP specifications.

**Main application:** Suitable for gearboxes on food handling and processing equipment. May also be used for general machine lubrication, e.g. chains.



	Typical Viscosity at 40°C [mm <sup>2</sup> /s]	Typical Viscosity at 100°C [mm <sup>2</sup> /s]
CASSIDA FLUID GL 150	150	19
CASSIDA FLUID GL 220	220	25
CASSIDA FLUID GL 320	320	33
CASSIDA FLUID GL 460	460	44
CASSIDA FLUID GL 680	680	59

#### CASSIDA FLUID GLE 150 | 220

Fully synthetic, high-performance, anti-wear gear fluids for use in the food canning industry. Provides excellent lubrication, even when operating in locations where the product may be subject to contamination with water, juice and food. CASSIDA FLUID GLE holds these contaminants in suspension, thus protecting metal surfaces from wear and corrosion. Approved by Angelus Sanitary Can Seaming Company for can seamer lubrication.

**Main application:** Lubrication of rotary can seaming machines, including both enclosed and total loss systems, and for circulating and bearing oil systems where contamination with water or food juices can occur.



	Typical Viscosity at 40°C [mm <sup>2</sup> /s]	Typical Viscosity at 100°C [mm <sup>2</sup> /s]
CASSIDA FLUID GLE 150	150	19
CASSIDA FLUID GLE 220	220	25

#### CASSIDA FLUID WG 220 | 320 | 460 | 680 | 1000

Fully synthetic, high-performance gear lubricants for worm gear boxes. High resistance to micro-pitting. Provides exceptional thermal stability and corrosion protection. Exceptional low-friction characteristics providing efficient power transmission. Meet DIN 51717 CLP and ISO 6743/6 specifications.

**Main application:** For the lubrication of worm gear boxes in food processing plants. Ideal for all worm gear applications. Suitable for use in situations where equipment gets routinely cleaned before and after use and where water might enter the lubricant.



	Typical Viscosity at 40°C [mm <sup>2</sup> /s]	Typical Viscosity at 100°C [mm <sup>2</sup> /s]
CASSIDA FLUID WG 220	220	42
CASSIDA FLUID WG 320	320	61
CASSIDA FLUID WG 460	460	83
CASSIDA FLUID WG 680	680	122
CASSIDA FLUID WG 1000	1000	163

## HYDRAULIC OILS

### CASSIDA FLUID HF 15 | 32 | 46 | 68 | 100

Fully synthetic, high-performance, long-life, anti-wear hydraulic oils. Meet ISO 6743/4 HM, DIN 51524 HLP, HVLP, and DIN 51517 CLP (ISO 68 and ISO 100) specifications.

**Main application:** Hydraulic systems, hydrostatic gears and control systems, plain and anti-friction bearings on food handling and processing equipment.



	Typical Viscosity at 40°C [mm <sup>2</sup> /s]	Typical Viscosity at 100°C [mm <sup>2</sup> /s]
CASSIDA FLUID HF 15	15	3.6
CASSIDA FLUID HF 32	32	6
CASSIDA FLUID HF 46	46	8
CASSIDA FLUID HF 68	68	11
CASSIDA FLUID HF 100	100	14

### CASSIDA FLUID FL 15 | 32 | 46 | 68 | 100

Fully synthetic, high-performance, long-life, anti-wear speciality hydraulic oils. Meet ISO 6743/4HM and DIN 51524 HLP and HVLP specifications.

**Main application:** Hydraulic systems, hydrostatic gears and control systems, plain and anti-friction bearings on food handling and processing equipment.



	Typical Viscosity at 40°C [mm <sup>2</sup> /s]	Typical Viscosity at 100°C [mm <sup>2</sup> /s]
CASSIDA FLUID FL 15	15	4
CASSIDA FLUID FL 32	32	6
CASSIDA FLUID FL 46	46	8
CASSIDA FLUID FL 68	68	11
CASSIDA FLUID FL 100	100	14

### CASSIDA FLUID HFS 46 | 68

Fully synthetic, high-performance, long-life, anti-wear hydraulic oils with boosted solvency and lubricity. Resist the formation of harmful oxidation products, even at elevated temperatures. Meet ISO 6743/4 HV and DIN 51524 HLP and HVLP specifications.

**Main application:** Hydraulic systems, hydrostatic gears and control systems, plain and anti-friction bearings on food handling and processing equipment. Can be used on demanding injection moulding machinery.



	Typical Viscosity at 40°C [mm <sup>2</sup> /s]	Typical Viscosity at 100°C [mm <sup>2</sup> /s]
CASSIDA FLUID HFS 46	46	7.9
CASSIDA FLUID HFS 68	68	11

## CASSIDA FLUIDS

### MAINTENANCE FLUIDS

#### CASSIDA FLUID FL 5 | FL 5 Spray

Fully synthetic penetrating fluid with excellent creeping and penetrating features. Capillary effect allows quick penetration between rusty and encrusted contact surfaces. Lubricates and protects against corrosion. Has a neutral odour and taste.

**Main application:** Penetrating fluid for use in food grade equipment. Can be used for the disassembling of screws, interlocking nuts, and other components. Offers corrosion protection for metal components. Can be used for lubrication of various non-demanding applications where food grade lubricants are required.

\*without propellant



	Typical Viscosity at 40°C [mm <sup>2</sup> /s]	Typical Viscosity at 100°C [mm <sup>2</sup> /s]
CASSIDA FLUID FL 5	3.8	1.1
CASSIDA FLUID FL 5 Spray	3.8*	1.1*

#### CASSIDA SILICONE FLUID | CASSIDA SILICONE FLUID Spray

Silicone-based, fully synthetic, multi-purpose fluid. Thermal stability up to 250 °C. Excellent adhesive properties minimise fling-off in use and wash-off by both cold and hot water. Readily displaces water. Formulated for use on metal-to-non-metal or non-metal-to-non-metal contact surfaces.

**Main application:** For lubrication of conveyors; slow rotating machinery; small, slow-speed bearings and pivot points found in equipment in the food industry.

\*without propellant



	Typical Viscosity at 25°C [mm <sup>2</sup> /s]	Typical Viscosity at 40°C [mm <sup>2</sup> /s]
CASSIDA SILICONE FLUID	350	270
CASSIDA SILICONE FLUID Spray	1000*	730*

#### CASSIDA PTFE DRY Spray

Synthetic PTFE multi-purpose and maintenance lubricant, based on a unique blend of components.

**Main application:** For use on belts, cams, chains, cables, conveyors, sliding tracks, joints, pivots, lifts, pulleys, threaded parts, bolts, rollers, taps, valves, and many other moving parts.

For lubrication and protection of seals and guides, operating in food, pharmaceutical, and other clean environments where incidental food contact is possible.

\* including solvent



	Typical Viscosity at 20°C [mm <sup>2</sup> /s]
CASSIDA PTFE DRY Spray	0.8*

### VACUUM PUMP FLUIDS

#### CASSIDA FLUID VP 68 | 100

Fully synthetic, high-performance vacuum pump oils.

**Main application:** Vacuum pumps producing a medium vacuum, used in the food and beverage processing and packing industry.



	Typical Viscosity at 40°C [mm <sup>2</sup> /s]	Typical Viscosity at 100°C [mm <sup>2</sup> /s]
CASSIDA FLUID VP 68	68	10.5
CASSIDA FLUID VP 100	100	14

## CASSIDA GREASES

### REGULAR LOAD

#### CASSIDA GREASE RLS 000 | 00 | 0 | 1 | 2

High-performance, regular-load aluminium complex greases with synthetic base fluid.

**Main application:** For use on bearings, bushings and linkages on food manufacturing equipment. CASSIDA GREASE RLS 0, and 00 are particularly recommended for centralised lube systems or other similar systems where an NLGI 2 grease may be difficult to dispense.



	Typical Viscosity at 40°C [mm <sup>2</sup> /s]	Typical Viscosity at 100°C [mm <sup>2</sup> /s]	NLGI-Grade
CASSIDA GREASE RLS 000	100	13	<000
CASSIDA GREASE RLS 00	100	13	00
CASSIDA GREASE RLS 0	150	18	0
CASSIDA GREASE RLS 1	150	18	1
CASSIDA GREASE RLS 2	150	18	2

### EXTREME PRESSURE

#### CASSIDA GREASE EPS 00 | 1 | 2

High-performance, extreme-pressure aluminium complex greases with synthetic base fluid.

**Main application:** For use on bearings, bushings, and linkages on food manufacturing equipment, particularly where high pressure and loads, high temperatures, and water spray occur. CASSIDA GREASE EPS 00 is especially recommended for centralised lube systems and enclosed gears.



	Typical Viscosity at 40°C [mm <sup>2</sup> /s]	Typical Viscosity at 100°C [mm <sup>2</sup> /s]	NLGI-Grade
CASSIDA GREASE EPS 00	220	25	00
CASSIDA GREASE EPS 1	220	25	1
CASSIDA GREASE EPS 2	220	25	2

### HEAVY DUTY

#### CASSIDA GREASE HDS 00 | 2

High-performance, high-viscosity heavy-duty aluminium complex greases with synthetic base fluid.

**Main application:** For use on bearings, bushings, and linkages on food manufacturing equipment, particularly where slower speeds, high pressure and loads, high temperatures, and water spray are present. CASSIDA GREASE HDS 00 is recommended for open gears and centralised lube systems.



	Typical Viscosity at 40°C [mm <sup>2</sup> /s]	Typical Viscosity at 100°C [mm <sup>2</sup> /s]	NLGI-Grade
CASSIDA GREASE HDS 00	800	68	00
CASSIDA GREASE HDS 2	800	68	2

## CASSIDA GREASES

### SPECIALITIES

#### CASSIDA GREASE GTS 2 | GTS Spray

Speciality extreme-pressure calcium sulphonate complex greases with synthetic base fluid. Excellent extreme pressure, anti-wear, and corrosion prevention properties.

**Main application:** For use on bearings of electric motors, pumps, conveyors, mixers, gear units, and medium- to high-speed bearings operating up to 170°C.

\*without propellant



	Typical Viscosity at 40°C [mm <sup>2</sup> /s]	Typical Viscosity at 100°C [mm <sup>2</sup> /s]	NLGI-Grade
CASSIDA GREASE GTS 2	50	8.6	2
CASSIDA GREASE GTS Spray	50*	8.6*	2*

#### CASSIDA GREASE GTX 0 | 2

High-performance, extreme-pressure calcium sulphonate complex grease with synthetic base fluid. Excellent extreme pressure, anti-wear, and corrosion prevention properties.

**Main application:** For use on bearings of electric motors, pumps, conveyors, mixers, gear units, and bearings. Heavy-loaded and shock-loaded applications with low- to medium-speed bearings operating up to 180 °C, such as machines used to process pet food and animal feed.



	Typical Viscosity at 40°C [mm <sup>2</sup> /s]	Typical Viscosity at 100°C [mm <sup>2</sup> /s]	NLGI-Grade
CASSIDA GREASE GTX 0	400	40	0
CASSIDA GREASE GTX 2	400	40	2

#### CASSIDA GREASE HTS 2

Inorganically thickened grease with synthetic base fluid.

**Main application:** Suitable for applications on food manufacturing equipment where high temperatures (peak 220 °C) may be experienced.



	Typical Viscosity at 40°C [mm <sup>2</sup> /s]	Typical Viscosity at 100°C [mm <sup>2</sup> /s]	NLGI-Grade
CASSIDA GREASE HTS 2	400	40	2

#### CASSIDA GREASE LTS 1

High-performance aluminium complex grease with low-viscosity synthetic base fluid.

**Main application:** For use on bearings, bushing, and linkages on food manufacturing equipment. Particularly recommended for use in cold storage situations with temperatures down to -50 °C.



	Typical Viscosity at 40°C [mm <sup>2</sup> /s]	Typical Viscosity at 100°C [mm <sup>2</sup> /s]	NLGI-Grade
CASSIDA GREASE LTS 1	20	4.5	1



## CASSIDA GREASE P 1

Specialty high-performance grease. Inorganically thickened with fully synthetic base fluids.

**Main application:** Lubrication of heavily loaded plain or roller bearings, joints, linkages, and slides up to 150 °C (peak 180°C) and protection of seals and guides.



	Typical Viscosity at 40°C [mm <sup>2</sup> /s]	Typical Viscosity at 100°C [mm <sup>2</sup> /s]	NLGI-Grade
CASSIDA GREASE P 1	770	65	1

## CASSIDA GREASE MD 2

High-performance, silicone-based speciality grease specially developed for the lubrication, and sealing of taps, valves, and fittings with EPDM seals. Suitable for use with other seal materials normally used in food machinery lubrication systems. Good resistance to hot water, steam, and disinfectant solutions.

**Main application:** Taps, flow meters and fittings used for the handling of water, drinks, and beer. Seals on autoclaves, and sterilisers. Suitable for continuous operation at temperatures up to 180 °C and short-term exposure to temperatures not exceeding 250 °C.



	Typical Viscosity at 40°C [mm <sup>2</sup> /s]	Typical Viscosity at 100°C [mm <sup>2</sup> /s]	NLGI-Grade
CASSIDA GREASE MD 2	650	250	2-3

## CASSIDA GREASE FC 1 | 2

Fully synthetic, high-performance, high-temperature greases for the filled-for-life lubrication of bearings and seals used in extreme temperatures and/or aggressive environments. Effective anti-corrosion prevention characteristics. Excellent elastomer compatibility. Suitable for applications where components might be exposed to reactive chemicals and gases; chemically inert or non-reactive in the event of contact with strong acids, alkalis, and halogens. Excellent elastomer compatibility.

**Main application:** Plain/roller bearing elements, joints, micro-bearings, precision tools, linkages, and mechanical seals. Suitable for continuous operation at temperatures up to 260 °C and short-term exposure to temperatures not exceeding 300 °C.



	Typical Viscosity at 40°C [mm <sup>2</sup> /s]	Typical Viscosity at 100°C [mm <sup>2</sup> /s]	NLGI-Grade
CASSIDA GREASE FC 1	510	47	1
CASSIDA GREASE FC 2	510	47	2

## CASSIDA PASTE AP

Synthetic assembly/disassembly paste for food and beverage processing equipment.

**Main application:** Assembly and disassembly paste with an extremely large range of applications, e.g. screw paste for high-alloy steels to optimise the tightening torque, mounting, and pressing of bearings, and disks, wheels and bolts, for the lubrication of adjusting mechanisms as well as for drifting, bending, punching, pressing, and stamping. Protects from fretting corrosion. Protects from seizing - easy disassembling.



	Typical Viscosity at 40°C [mm <sup>2</sup> /s]	Typical Viscosity at 100°C [mm <sup>2</sup> /s]	NLGI-Grade
CASSIDA PASTE AP	85	12	1

## FM RANGE

### FM COOLANT

Propylene-glycol-based fluid containing anti-corrosion additives, for use in closed systems to chill/cool/heat food or beverages in food industry applications. Designed to be used in mixtures with potable water. Suitable for operation in the range of -45 °C to 120 °C.

**Main application:** Secondary cooling, or heating, in the food and beverage industry. For use in closed cooling systems, including those where there is a potential for incidental food contact. Not to be used for applications where there is direct contact between food and the coolant.

### FM HEAT TRANSFER FLUID 32

High-performance heat transfer fluid. Can handle a wide range of application temperatures and has excellent thermal and oxidative stability to minimise cracking and promote long service life.

**Main application:** For closed-circuit and pressureless heat transfer systems with a bulk oil temperature range of approximately -10 °C to max. +325 °C where the surface temperature of the heating elements (oil film temperature) should not exceed +340 °C.

### FM HYDRAULIC OIL 32 | 46 | 68 | 100

Hydraulic fluids for food and beverage processing equipment.

**Main application:** Hydraulic systems, hydrostatic gears and control systems, plain and anti-friction bearings on food handling and processing equipment.

### FM GEAR OIL TLS 150

Speciality anti-wear gear lubricant specifically designed for use in the food and beverage canning industry. Provides good lubrication even when operating in locations where it is subject to contamination with water, juice, and food. Holds these contaminants in suspension, thus protecting metal surfaces from wear and corrosion. Only to be used for total loss systems.

**Main application:** Suitable for can seamer gearboxes on food handling and processing equipment. May also be used for general machine lubrication.

### FM FLUID RC 150 | 220

Specialty high performance fluids specially developed for use in rotary cooking equipment in food and beverage canning plants. Provide good lubrication even when operating in locations where they are subject to contamination with water.

**Main application:** For use in the centralised systems of rotary cookers and sterilisers which lubricate the can exchange valves and other moving components.



	Typical Viscosity at 20°C [mm <sup>2</sup> /s]	Typical Viscosity at 40°C [mm <sup>2</sup> /s]
FM COOLANT	47	17



	Typical Viscosity at 40°C [mm <sup>2</sup> /s]	Typical Viscosity at 100°C [mm <sup>2</sup> /s]
FM HEAT TRANSFER FLUID 32	35	6



	Typical Viscosity at 40°C [mm <sup>2</sup> /s]	Typical Viscosity at 100°C [mm <sup>2</sup> /s]
FM HYDRAULIC OIL 32	32	5.7
FM HYDRAULIC OIL 46	46	7
FM HYDRAULIC OIL 68	68	9
FM HYDRAULIC OIL 100	100	11.5



	Typical Viscosity at 40°C [mm <sup>2</sup> /s]	Typical Viscosity at 100°C [mm <sup>2</sup> /s]
FM GEAR OIL TLS 150	150	15



	Typical Viscosity at 40°C [mm <sup>2</sup> /s]	Typical Viscosity at 100°C [mm <sup>2</sup> /s]
FM FLUID RC 150	150	15.5
FM FLUID RC 220	220	20.4

## FM GEAR OIL 220 | 460

Gear lubricants for food and beverage processing equipment.

**Main application:** Suitable for gearboxes on food handling and processing equipment. May also be used for general machine lubrication or as flushing fluid.



	Typical Viscosity at 40°C [mm²/s]	Typical Viscosity at 100°C [mm²/s]
FM GEAR OIL 220	220	20
FM GEAR OIL 460	460	30

## FM SUGAR DISSOLVING FLUID

Emulsifiable oil-based cleaning and rust protecting concentrate. Designed to be used in mixtures with potable water on machine surfaces in the food and sugar manufacturing industry.

**Main application:** For cleaning and flushing sugar or sugar-based deposits from food and beverage manufacturing equipment. For freeing moving parts or screws and bolts that are stuck with sugar deposits. For lubrication of lightly loaded bearings and slideways, especially where sugar deposits are likely to form.



	Typical Viscosity at 40°C [mm²/s]	Typical Viscosity at 100°C [mm²/s]
FM SUGAR DISSOLVING FLUID	34	6

## FM FLUID DC 20 | 68

White mineral oil, multi-purpose, low-volatility fluids suitable for both direct and incidental food contact applications. Can handle a wide range of applications.

**Main application:** Absorber oils for edible oil extraction plant solvent recovery systems. Release agent used on grills, loaf pans, cutters, boning benches, chopping blocks, or other hard surfaces to help prevent food from adhering during processing. Forming oils for the manufacture of both two- and three-piece cans for food and beverages.



	Typical Viscosity at 40°C [mm²/s]	Typical Viscosity at 100°C [mm²/s]
FM FLUID DC 20	22	4
FM FLUID DC 68	68	9.5

## FM GREASE DC 2 | FM GREASE DC Spray

White mineral oil grease, multi-purpose, suitable for both direct and incidental food contact applications. Can handle a wide range of applications.

**Main application:** For use as a direct food contact release agent for grills, loaf pans, cutters, boning benches, chopping blocks, and other hard surfaces to help prevent food from adhering during processing. Lubrication and protection of seals, guides, bearings, and blades operating in food, pharmaceutical, and other clean environments where direct food contact is inevitable.

\*without propellant



	Typical Viscosity at 40°C [mm²/s]	Typical Viscosity at 100°C [mm²/s]	NLGI-Grade
FM GREASE DC 2	100	11	2
FM GREASE DC Spray	100	11	00*

## FM GREASE HD 1.5 | 2

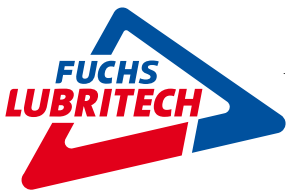
Modified aluminium complex heavy-duty, extreme-pressure greases.

**Main application:** For use on slow to medium-speed plain and rolling element bearings in heavy-loaded and shock-loaded applications. Recommended for use in machinery requiring frequent changes of the grease charge or with a high product consumption rate, such as machines used to process pet food and animal feed.



	Typical Viscosity at 40°C [mm²/s]	Typical Viscosity at 100°C [mm²/s]	NLGI-Grade
FM GREASE HD 1.5	550	38	1.5
FM GREASE HD 2	550	38	2

# CASSIDA food grade lubricants



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