



CASSIDA FLUID WG

High performance, synthetic gear lubricants for worm gear boxes used in the food & beverage processing equipment

Description

CASSIDA FLUID WG 220, 320, 460 and 680 are high performance, anti-wear gear oils for the lubrication of worm gears, highly loaded gears and applications where high resistance to micro-pitting is needed, for the use in food and beverage processing equipment.

They are based on a careful blend of synthetic fluids and selected additives chosen for their ability to meet the stringent requirements of the food & beverage industry.

Registered by NSF (Class H1) for use where there is potential for incidental food contact. Products contain only substances permitted under US 21 CFR 178.3570, 178.3620 and 182 for use in lubricants with incidental food contact.

Application

- Especially recommended for use in worm gears and applications where excellent thermal stability is required
- Lubrication of enclosed gear boxes used in the food industry
- High load carrying capability, for extreme pressure applications

Advantages/Benefits

- High resistance to micro-pitting
- Neutral odour and taste
- High viscosity index: Maintains higher viscosities at higher temperatures, giving thicker oil films under difficult conditions
- CASSIDA FLUID WG grades provide excellent thermal stability, load carrying properties and corrosion protection. Resistant to the formation of harmful oxidation products
- Exceptional low friction providing efficient power transmission. Measured worm gear efficiency is high relative to other oils
- Water solubility makes CASSIDA FLUID WG ideal for use in situations where equipment gets routinely cleaned before and after use and where some water might penetrate into the lubricant
- Do **NOT** mix with mineral oils or PAO

Specifications and Certificates

- NSF H1 registered
- Kosher
- Halal
- DIN 51517 CLP
ISO 6743/6 L-CKD, CKE

September 2010 GDUK Page 1 of 4

Health, Safety and Environment - information is provided for products in the relevant Safety Data Sheet. This provides guidance on potential hazards, precautions and first-aid measures, together with environmental effects and disposal of used products.

While the information and figures given here are typical of current production and conform to specification, minor variations may occur. No warranty expressed or implied is given concerning the accuracy of the information or the suitability of the products



Change over procedures

When changing from a lubricant based on mineral oil or PAO, the following procedure **must** be followed: The equipment should be at normal operating temperature then the oil drained off as fully as possible. Special attention should be paid to reservoirs, lines etc. where oil may be trapped. **Then the system must be flushed with the new lubricant**, which should then be drained before refilling with fresh, new lubricant.

Note: Seals previously exposed to mineral oils may shrink when exposed to CASSIDA FLUID WG. This can result in oil leaks. It may therefore sometimes be necessary to replace them.

Synthetic lubricants

- Do not contain natural products derived from animals or genetically modified organisms (GMO)
- Do not contain any allergenic or intolerance inducing substances as specified in Annex IIIa of EC directive 2003/89/EC
- Suitable for use where vegetarian and 'nut free' food is prepared
- Biostatic; do not promote the growth of bacteria or fungal organisms

Approvals & Recommendations

This is an ongoing process, please contact FUCHS for any updates.

Seal and Paint Compatibility

Compatible with most of the elastomers, gaskets and seals normally used in food machinery lubrication systems. Nitrile rubber (NBR), Fluoro-Silicone or Vinyl-Methyl Polysiloxane (Q) are recommended especially where high temperatures are involved. Polyurethane based elastomers, leather, cork, asbestos paper and board should be avoided. Note: see warning about seal shrinkage in section on change-over procedures. Some ordinary industrial paints soften in the presence of CASSIDA FLUID WG. Internal gearbox surfaces should ideally be unpainted or coated with resistant material such as two-part epoxy formulations.

Protect the environment

Take used lubricants and empty packs to an authorised collection point. Do not discharge into drains, soil or water.



"Incidental Food contact"

Registered by NSF (Class H1) and meet the USDA H1 guidelines (1998) for lubricants for use where there is a potential for incidental food contact. Made only from substances permitted under the US FDA Title 21 CFR 178.3570, 178.3620 and/or those generally regarded as safe (US 21 CFR 182) for use in food grade lubricants. To comply with the requirements of US 21 CFR 178.3570, contact with food should be avoided where possible. In the case of incidental food contact, the concentration of the products in the food must not exceed 10 parts per million (10mg/kg of foodstuff). In locations and/or applications where local legislation does not specify maximum concentration limits, FUCHS recommends that this same 10ppm limit be observed, as up to this concentration CASSIDA FLUID WG grades will not impart undesirable taste, odour or colour to food, nor will they cause adverse health effects. Consistent with good manufacturing practice, use only the amount necessary to achieve correct lubrication and take appropriate corrective action should excessive incidental contact with food be detected.

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°C and 40°C. Provided that the products have been stored under these conditions we recommend that the products be used within 5 years from the date of manufacture. Consult FUCHS for details. Accept for use new CASSIDA FLUID WG grades only if the manufacturer's seal is intact. Before opening the packs ensure the area around the closure is clean. It is recommended that it be cleaned with potable water and then dried with a clean cloth before opening. Record the date the seal was broken. To prevent product contamination, always close the package after use. Upon opening a pack, the product must be used within 2 years (or within 5 years of date manufacture, whichever is the sooner)

September 2010 GDUK Page 3 of 4

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CHARACTERISTICS: CASSIDA FLUID WG

Characteristics	Unit					Test Method
CASSIDA FLUID WG		220	320	460	680	
NSF Registration No.		133399	133400	133401	133402	
Colour		Clear, amber				
Density at 15°C	kg/m ³	1057	1062	1067	1072	ISO 12185
Flashpoint	°C	249	251	254	258	ISO 2592
Pourpoint	°C	-42	-39	-36	-33	ISO 3016
Kinematic Viscosity at 40°C	mm ² /s	227	339	477	725	ISO 3104
Kinematic Viscosity at 100°C	mm ² /s	41.9	60.6	83	122	ISO 3104
Viscosity index		240	250	260	272	ISO 2909
FZG-Test A/8.3/90	Failure Load Stage					ISO 14635-1
		>12				

September 2010 GDUK Page 4 of 4

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