



SHELL CASSIDA[®] FLUIDS GLE

Machine lubricant for use in food manufacturing equipment

Product Description

Shell Cassida[®] Fluids GLE is fully synthetic, high performance, anti-wear gear lubricants that were specifically designed for use in the food and beverage canning industry. 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 industry. Registered by the NSF (Class H1) for use where there is potential for incidental contact with food. This product line meets the former requirements (1998) of the US Department of Agriculture (USDA) for H1 use (lubricant with incidental food contact). Product contains only substances permitted under US 21 CFR 178.3570, 178.3620 and US 21 CFR 182 for use in lubricants with incidental food contact.

Shell Cassida[®] Fluids GLE do not contain any natural products derived from animals, nuts or genetically modified organisms (GMOs). It is suitable for use where vegetarian and nut-free food is prepared. **Shell Cassida[®] Fluids GLE** do not promote the growth of bacteria or fungal organisms.

Applications

- lubrication of rotary can seaming machines, both enclosed and total loss systems
- circulating and bearing oil systems where contamination with water or food juice can occur

Features/Benefits

- fully synthetic base fluid has a natural ability to provide excellent lubrication under variety of applications
- **Shell Cassida[®] GLE** is specially formulated to handle water and juice contamination, protecting metal surfaces from wear and corrosion
- odorless, tasteless, non-toxic
- excellent separation properties from water, in oil recirculating and filtration systems
- good anti-oxidant properties, resists the formation of deposits and sludge even at elevated temperatures maximize long oil and equipment life
- compatible with the elastomers, gaskets, seals and paints normally used in lubrication systems employed in the food processing and packaging industry

Specifications and Certificates

- NSF H1
- Kosher
- Halal
- DIN 51517 CLP

Approvals and Recommendations

- Angelus Sanitary Can Seaming Company for can seamer lubrication (Low speed use 220 grade, High Speed use **Cassida® GLE 150** or **Cassida® GLE 100**)
- FMC for can seamer lubrication
- FMC for lubrication of citrus juice extractor machines

Incidental Food Contact

Registered by NSF (Class H1) and meet the former USDA H1 guidelines (1998) for lubricants 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 this product in the food must not exceed 10 parts per million (10 mg/kg of foodstuff). In locations and/or applications where local legislation does not specify maximum concentration limits, this same 10 ppm limit should be observed, as up to this concentration **Shell Cassida® Fluid GLE** will not impart undesirable taste, odor, or color to food. 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, such as Shell Cassida® Fluid GLE, should be stored separately, out of direct sunlight or other heat sources, away from other lubricants, chemical substances and foodstuffs. Store between 0 and 40 deg. C. Under these conditions, the recommended shelf life of the product unopened, is 5 years from date of manufacture. Accept for use new Shell Cassida® products only if the manufacturer's seal is intact, and then record the date the seal was broken. Before opening the pack ensure the area around the closure is clean. It is recommended that it be cleaned with Shell Cassida® Fluid PL or Shell Cassida® Flushing Fluid and/or potable water. Record the date the seal was broken. To prevent product contamination, always close the package after use. Use the product within 2 years of opening.

Typical Properties of Shell Cassida® Fluid GLE				
	Test Method	100	150	220
Product Code		65191	65183	65184
NSF Registration No.		127660	119921	119104
Appearance		Colorless to v. lt. pale	Colorless to v. lt. pale	Colorless to v. lt. pale
Density at 15°C (kg/l)	ISO 12185	0.840	0.850	0.850
Kinematic Viscosity @ 40°C, cSt	D 3104	100	150	220
@ 100°C, cSt		14	19	25
Viscosity Index	ISO 2909	142	144	143
Flash Point COC, °F	ISO 2592	500	480	520
Pour Point, °F	ISO 3016	-70	-65	-54
FZG Gear Test	(DIN 51534/Part 2)	-----	Stage 12 Pass	-----
Steel Corrosion	D 665	Pass	Pass	Pass

Produced according to Shell Quality Standards, in facilities where HACCP audit and Good Manufacturing Practice have been implemented and form part of the ISO 9001/ISO 14001 quality system. The characteristics given above are typical of current production and slight batch to batch variations may occur. However, all production will conform to Shell's specifications.

Handling & Safety Information

As for all oils, prolonged or repeated contact with the skin should be avoided. For information on the safe handling and use of this product, refer to its Material Safety Data Sheet at <http://www.shell-lubricants.com/msds/>. If you are a Shell Distributor, please call **1+800-468-6457** for all of your service needs. All other customers, please call **1+800-840-5737** for all of your service needs. Information is also available on the World Wide Web: <http://www.shell-lubricants.com/>.