



SHELL CASSIDA[®] GREASES RLS

Greases for the food manufacturing industry

Product Description

Shell Cassida[®] Greases RLS 00, 0, 1, and 2 are specially blended for the grease lubrication of machinery used in the food industry. They are based on an aluminum complex thickener, synthetic fluids and selected additives chosen for their ability to meet the stringent requirements of the food industry.

Registered by NSF (Class H1) for use where there is potential for incidental contact with food. These products meet the former guidelines (1998) of the US Department of Agriculture Food Safety and Inspection Service (USDA FSIS) for H1 use (lubricant with incidental food contact) and formerly listed in Miscellaneous Publication No. 1419 “List of Proprietary Substances and Nonfood Compounds”. Product contains only substances permitted under US 21 CFR 178.3570, 178.3620 and 182 for use in lubricants with incidental food contact.

Shell Cassida[®] Greases RLS 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[®] Greases RLS do not promote the growth of bacteria or fungal organisms.

Applications

Cassida[®] Grease RLS 00/RLS 0

- lightly loaded grease lubricated gear boxes
- automatic, centralized lubrication systems

Cassida[®] Grease RLS 1 and 2

- rolling element and plain bearings
- joints and linkages open to the atmosphere
- automatic, centralized lubrication systems
- Shell Cassida[®] Grease RLS 1 is suitable for Lincoln centralized lubrication systems

Features/Benefits

- good water resistance, offers lasting protection even in the presence of large amounts of water
- good oxidation and mechanical stability, resists the formation of deposits caused by oxidation at high operating temperatures and maintains consistency, reducing leakage
- effective corrosion protection, helps prevent failure of components/bearings due to corrosion
- good adhesive properties
- neutral odor and taste

Seal and Paint Compatibility

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
- **SVGW (Swiss Water and Gas Authority)**

Approvals and Recommendations

- David Brown, for use in gearboxes
- FMC (RLS 00) for use in Lincoln centralized lubrication systems in 752-S1 can seamers
- FMC (RLS 1) for Lincoln centralized lubrication systems in SJ32, 33 injectors or similar systems
- FMC Can Seamers CX 52 Series (RLS 00, 2)
- Angelus Can Seamers (RLS 0 and 2)
- Krones (RLS 1)
- Getriebebau Nord (RLS 2)
- Buehler Uzwil (RLS 00) for gearing and central lubrication systems
- Woerner
- Stork Food and Dairy Systems (RLS 2)

Operating Temperatures

RLS 00: -49°F to 212°C (peak up to 245 °F)

RLS 0: -40°F to 212°C (peak up to 245 °F)

RLS 1: -40°F to 245°F (peak up to 280 °F)

RLS 2: -30°F to 245°F (peak up to 280 °F)

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 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 Grease RLS** 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® Grease RLS, should be stored separately, out of direct sunlight or other heat sources, from other lubricants, chemical substances and foodstuffs. Store between 0°C and 40°C. Under these conditions, the recommended shelf life of this product, unopened, is 2 years from date of manufacture. Accept for use new 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® 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 the package.

Typical Properties of Shell Cassida[®] Grease RLS

	Test Method	RLS 00	RLS 0	RLS 1	RLS 2
Product Code		5060706 (pails) 5060974 (drums)	71242	5057115 (keg only) 5059212 (tubes)	71243
NSF Registration No.		92551	119920	92552	92553
Appearance	Visual		White smooth paste	White smooth paste	White Smooth Paste
NLGI Consistency		00	0	1	2
Thickener Type		Aluminum complex	Aluminium Complex	Aluminum Complex	Aluminum Complex
Base Oil Type		Synthetic	Synthetic	Synthetic	Synthetic
Viscosity @40 °C, cSt	ISO 3104	100	150	150	150
Worked Penetration at 25°C	ISO 2137	415	370	325	280
Dropping Point, °C(°F)	ISO 2176	>200 (>390)	>240(>460)	>240(>460)	>240(>460)
Application Range, °F		-49 to +212	-40 to + 212	-40 to +245	-30 to +245
Short Time Peak Temp. °F		up to +245	up to +245	up to +280	up to +280

Handling & Safety Information

As for all lubricants, 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/>.