



SHELL CASSIDA[®] GREASES EPS

Extreme pressure greases for the food industry

Product Description

Shell Cassida[®] Grease EPS 00, 1 and 2 are very high performance extreme pressure lubricants specially blended for the grease lubrication of machinery used in food and beverage processing and packaging industry. They are based on an aluminium complex thickener, synthetic fluid 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 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 EPS 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 EPS do not promote the growth of bacteria or fungal organisms.

Applications

Shell Cassida[®] Grease EPS 00

- enclosed industrial gearboxes
- automatic, centralized lubrication systems

Shell Cassida[®] Grease EPS 1

- plain and rolling element bearings
- enclosed industrial gearboxes
- automatic, centralised lubrication systems

Shell Cassida[®] Grease EPS 2

- rolling element and plain bearings
- joints, linkages and slides
- suitable for a wide range of applications including roller element bearings

Shell Cassida[®] Grease EPS may also be used as protective anti-rust films and as release agents on gaskets & seals of tank closures.

Features/Benefits.

- excellent water resistance
- excellent oxidation and mechanical stability
- excellent corrosion prevention characteristics
- excellent 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.

Operating Temperature Ranges

Shell Cassida® Grease EPS:

EPS 00: -45°C to 100°C (peak up to 120°C)

EPS 1: -40°C to 120°C (peak up to 140°C)

EPS 2: -35°C to 120°C (peak up to 140°C)

Approvals and Recommendations

- NSF H1
- David Brown for use in gearboxes
- Approved for use in Kosher and Halal food production.

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® Grease EPS** 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 **Cassida® Greases**, should be stored separately, out of direct sunlight or other heat sources, from other lubricants, chemical substances and foodstuffs. Store between 0 and 40 deg. C. Provided that the product has been stored under these conditions, use **Shell Cassida® EPS** within 3 years from the 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® PL** or **Shell Cassida® Flushing Fluid** and/or potable water. Upon opening the package, use the product within 2 years of opening the package or 3 years from date of manufacture (whichever is sooner).

Typical Properties of Shell Cassida® Grease EPS

	Test Method	EPS 00	EPS 1	EPS 2
		1	1	2
Product Code		71239	71240	71241
NSF H1 Registration No.		119105	119106	92546
Appearance		Off-White	Off-White	Off-White
Thickner Type		Aluminum Complex	Aluminum Complex	Aluminum Complex
Base Oil Type		Synthetic	Synthetic	Synthetic
Viscosity @40 °C, cSt	D445	220	220	220
Penetration, dmm Worked 60 X	D217	415	325	280
Dropping Point, °F	Mettler	400+	450+	+450
Pumpability (Long distance)		Excellent	Good	Fair

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/>.