



Shell Cassida Grease EPS

Extreme pressure greases for the food manufacturing industry

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 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 food contact. These Products contain only substances permitted under US 21 CFR 178.3570, 178.3620 and 182 for use in lubricants with incidental food contact. They also meet the former guidelines (1998) of the US Department of Agriculture for Food Safety and Inspection Service (USDA) for H1.

Applications

Shell Cassida Grease EPS 00

- ◆ Enclosed industrial gearboxes
- ◆ Automatic, centralised 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
- ◆ Recommended for a wide range of applications including; clay and roller element bearings.

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

Performance Features

Shell Cassida Grease EPS are noted for their long life

- ◆ Excellent water resistance
- ◆ Excellent oxidation and mechanical stability
- ◆ Excellent corrosion prevention characteristics
- ◆ Excellent adhesive properties
- ◆ Neutral odour and taste

Seal and Paint Compatibility

Compatible with the elastomers, gaskets, seals and paints normally used in food machinery lubrication systems.

Specifications and Certificates

- ◆ NSF H1
- ◆ Kosher
- ◆ Halal
- ◆ SVGW (Swiss Water and Gas Authority)

Approvals & Recommendations

This is an ongoing process, please contact your local Shell company for any updates.

- ◆ David Brown, for use in gearboxes
- ◆ Krones
- ◆ Buehler Utzwil
- ◆ Alfa Laval decanting machines
- ◆ FMC: Shell Cassida EPS 2 for manual lubrication on can seamer 752-S and Shell Cassida EPS 00 on seamer 659
- ◆ California Pellet Mills
- ◆ Stork

Operating Temperatures

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)

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 203/98/EC
- ◆ Suitable for use where vegetarian and 'nut-free' food is prepared.
- ◆ Biostatic; does not promote the growth of bacteria or fungal organisms.

"Incidental Food contact"

Registered by NSF (Class H1) and meets 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 this product 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, Shell recommends that this same 10 ppm limit be observed, as up to this concentration Shell Cassida Grease EPS will not impart undesirable taste, odour or colour to food, nor will 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.

Health & Safety

Based on information available, Shell Cassida Grease EPS is unlikely to present any significant health or safety hazard when properly used in the recommended application and good standards of industrial and personal hygiene are maintained. As for all oils, prolonged or repeated contact with the skin should be avoided. For further information refer to the appropriate Shell Material Safety Data Sheet.

Lubricant condition during use

It is recommended that the condition of the grease and the equipment be regularly checked to ensure safe operation.

Care should be take to remove excess material after application.

Protect the environment

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

Handling and storage

All food grade lubricants, such as Shell Cassida Grease EPS, 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. Provided that the product has been stored under these conditions we recommend that the product be used within 3 years from the date of manufacture. Consult your local Shell Company for details.

Accept for use new Shell Cassida Grease EPS only if the manufacturer's seal is intact on the packaging. Before opening the pack ensure the area around the closure is clean. It is recommended that it be cleaned with Shell Cassida Fluid PL and/or 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 3 years of date of manufacture, whichever is the sooner).

Typical Physical Characteristics

Shell Cassida Grease EPS			00	1	2
Property	Test method				
NSF Registration No.			119105	119106	92546
Appearance			White, smooth paste		
Type of thickener			Aluminium complex		
Worked penetration at 25°C	¹ / ₁₀ mm	ISO 2137	400 - 430	310 - 340	265 - 295
NLGI number		DIN 51818	00	1	2
Kin. Visc. (base oil) at 40°C	mm ² /s	ISO 3104	220	220	220
Kin. Visc. (base oil) at 100°C	mm ² /s	ISO 3104	25	25	25
Dropping Point	°C	ISO 2176	>200	>240	> 240
Application range	°C		-45 to +100	-40 to +120	-35 to +120
Short term peak	°C		Up to +120	Up to +140	Up to +140
Standard designation		DIN 51502 ISO 6743/9	GP HC 00 G-40 LXE BEB 00	KP HC 1 K-40 LXDCEB 1	KP HC 2 K-30 LXCCEB 2

These characteristics are typical of current production and related to the base material before addition of solvent/propellant. Whilst future production will conform to Shell's specification, variations in these characteristics may occur.

Produced according to Shell Quality Standards, in facilities where HACCP audit and Good Manufacturing Practice have been implemented and form part of the quality/environment management system ISO 9001/ ISO 14001.