

Shell Cassida Fluid HF



Hydraulic fluids for food manufacturing machinery

Shell Cassida Fluid HF 15, 32, 46, 68 and 100 are high performance, anti-wear multi-purpose lubricants, specially developed for use in machinery used in the food and beverage processing and packaging industry.

They are based on a careful blend of synthetic hydrocarbons 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

- ◆ Hydraulic systems
- ◆ Hydrostatic gears
- ◆ Plain and anti-friction bearings
- ◆ General purpose lubrication including light duty gearboxes
- ◆ Circulating oil systems

Performance Features

- ◆ The base fluid has an ability to provide superior lubrication under the majority of operating conditions.
- ◆ Good anti-wear performance offers long and reliable component life, resulting in greater plant utilisation and therefore lower maintenance costs.
- ◆ Prevent component damage through excellent water separation properties, which resist formation of potentially harmful emulsions.
- ◆ Excellent air release and antifoam characteristics prevent cavitation.
- ◆ Resist the formation of harmful products of oxidation, even at elevated temperatures, resulting in long oil life.
- ◆ Neutral odour and taste
- ◆ High viscosity index results in minimum variation of viscosity with change in temperature.
- ◆ Effective protection against corrosion of metal surfaces.

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
- ◆ DIN 51524 HLP / HVLP
- ◆ ISO 6743/4 HM / HV
- ◆ BS 6413/4 HM

Approvals & Recommendations

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

- ◆ Krones
- ◆ David Brown
- ◆ Buehler Utzwil
- ◆ Mannesmann Rexroth (for axial piston pumps)
- ◆ FAG
- ◆ Ferrum (can seamer Cassida HF 100)
- ◆ FMC (can seamer, viscosity see to OEM specification)
- ◆ Westfalia Food Tec
- ◆ Piller Industrieventilatoren GmbH (Cassida HF 46)
- ◆ Poclair-Hydraulics (Cassida HF 46)

Synthetic lubricants

- ◆ Do not contain any natural products derived from animals or genetically modified organisms (GMOs).
- ◆ Suitable for use where vegetarian food is prepared.
- ◆ Biostatic; do not promote the growth of bacteria or fungal organisms.

“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 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 Cassida products 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 and Safety

Based on information available, Shell Cassida Fluid HF are 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.

Oil condition during use

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

Handling and storage

All food grade lubricants, such as Shell Cassida, 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.

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.

Protect the environment

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

Typical characteristics

Shell Cassida Fluid HF			15	32	46	68	100
Property	Test method						
NSF Registration No.			92540	92542	92543	92544	92539
Colour	colourless						
Density at 15°C	kg/m ³	ISO 12185	823	832	836	840	841
Flashpoint	°C	ISO 2592	216	222	248	258	268
Pourpoint	°C	ISO 3016	<-60			-60	-57
Kin. Visc. at 40°C	mm ² /s	ISO 3104	18	32	46	68	100
Kin. Visc. at 100°C	mm ² /s	ISO 3104	4,0	6,1	7,9	10,6	14,1
Viscosity index	ISO 2909		127	140	142	143	143
FZG-Test A/8.3/90							
Failure Load Stage	DIN 51354		n.a.	n.a.	> 12	> 12	

These characteristics are typical for current production. 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.