



# Shell Cassida Fluids HF

## Multi-purpose oils for the food industry

Shell Cassida Fluids HF are very 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 (PAO) and selected additives chosen for the ability to meet the stringent requirements of the food industry. Approved by the USDA (H1), they are recommended for use where incidental contact with food may occur.

### Applications

- Hydraulic systems
- Hydrostatic gears
- Airline lubrication (Shell Cassida Fluid HF 15)
- Plain and anti-friction bearings
- General purpose lubrication including light duty gearboxes
- Circulating oil systems

Shell Cassida Fluids HF are used where there is a possibility of incidental food contact.

### Performance Features

- **Superior lubrication**  
Base fluid has a natural ability to provide superior lubrication under the majority of operating conditions. Excellent, versatile performance in all recommended applications
- **Outstanding anti-wear performance**  
Long and reliable component life, resulting in greater plant utilisation
- **Excellent high temperature performance**  
Resist the formation of the harmful products of oxidation at elevated temperatures, resulting in long oil life
- **Neutral smell and taste**  
Essential of food industry lubricants
- **High viscosity index**  
Minimum variation of viscosity with change in temperature, gives the opportunity to reduce the number of lubricants used on site, resulting in reduced inventory cost.

- Good protection against corrosion  
Effective protection of all metal working surfaces.
- Formulated with FDA recognised components (Group 21 CFR 178.3570) to comply with the stringent demand throughout the food processing and packaging industry.
- USDA H1 Approved  
Authorised by the United States Department of Agriculture (USDA) as suitable for use as lubricants with incidental food contact in official establishments operating under the USDA meat and poultry products inspection programme.
- Approved for use in Kosher and Halal food production

### Performance Specifications

Easily exceed the requirements of the following industries:

Hydraulic Specifications  
BS 6413/4 HM  
ISO 6743/4 HM  
DIN 51524 HLP

Gear Oil Specification  
DIN 51517 CLP

Seal Compatibility  
Compatible with the elastomers, gaskets, seals and paints normally used in lubrication systems employed in the food processing and packaging industry.

### Health & Safety

Based on information available, Shell Cassida Fluids 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. Prolonged or repeated contact with the skin should be avoided.

For further information refer to the appropriate Shell Material Safety Data Sheet.

## Protect the environment

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

## Typical Physical Characteristics

Shell Cassida Fluid HF	15	22	32	46	68	100
<b>Appearance</b>	Water White	Water White	Water White	Water White	Water White	Water White
<b>Density at 15 °C (kg/L)</b>	0.819	0.824	0.829	0.833	0.837	0.838
<b>Viscosity at 40 °C (cSt)</b> IP 71	15	22	32	46	68	100
<b>Viscosity at 100 °C (cSt)</b> IP 71	4.0	4.8	6.1	8.0	10.4	14.0
<b>Viscosity Index</b> IP 226	122	133	140	142	143	143
<b>Flash Point (°C)</b> <b>COC</b> IP 36	205	212	222	248	258	268
<b>Pour Point (°C)</b> IP 15	<-60	<-60	<-60	<-60	<-55	< -55

These characteristics are typical of current production. Whilst future production will conform to Shell's specification, variations in these characteristics may occur.