

Futerra® HF 32

Equivalent product: Clarity Bio Elitesyn AW 32



Description

The Futerra® Hydraulic Fluid (HF) Series is the first of its kind. These renewable hydrocarbon-based environmentally acceptable lubricants (EALs) are designed to withstand extreme conditions and corrosion while operating in severe outdoor environments.

These lubricants are intended for severe service, extreme high temperature (250°F/121°C), low temperature (-40°F/-40°C) and high pressure (5000+psi/34,470 kPa) applications. Meets the technical requirements of ISO 15380. Its excellent oxidative and hydrolytic stability and near zero foaming tendency help to ensure that the fluids will last much longer than other EALs and conventional oils.

Futerra® offers greater flexibility and the ultimate system compatibility – offering drop-in replacement and broad seal compatibility. The Futerra® HF Series was specially designed for demanding applications where incidental environmental exposure of the lubricant is a cause for concern.

Typical Characteristics

ISO Grade	32
MPID	219732
Flash point, COC, °C (ASTM D92)	226
Foam Tend., Seq . I, mL (ASTM D892)	5
Foam Tend., Seq . II, mL (ASTM D892)	10
Foam Tend., Seq . III, mL (ASTM D892)	5
Kinematic Viscosity at 40°C, mm ² /s (ASTM D445)	32
Kinematic Viscosity at 100°C, mm ² /s (ASTM D445)	6.25
Viscosity Index (ASTM D2270)	135
FZG test, failure load stage, pass stage (ASTM D5182)	12
Pour point, °C (ASTM D97)	51

Recommended Applications

Futerra® HF 32 is designed to give maximum protection in hydraulic equipment used on vessels and in environmentally sensitive areas. This lubricant is readily biodegradable, non-bio accumulative, and minimally toxic. In the event of a spill, the product biodegrades by more than 60% within 28 days, minimizing the impact to the environment.

Futerra® HF 32 is approved for:

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| <input checked="" type="checkbox"/> Aker Solutions | <input checked="" type="checkbox"/> MacGregor Stern Ramps |
| <input checked="" type="checkbox"/> Berg/Caterpillar CPP | <input checked="" type="checkbox"/> Nakakita Thruster |
| <input checked="" type="checkbox"/> Cargotec-MacGregor Deck Equipment | |

Futerra® HF 32 meets the requirements of:

- | | |
|---|--|
| <input checked="" type="checkbox"/> CFR40 Part 435B: non-sheen | <input checked="" type="checkbox"/> Vickers 35VQ25, V104C Vane Pump |
| <input checked="" type="checkbox"/> Denison T6H20C HF 1, 2 & 6 | <input checked="" type="checkbox"/> ZF |
| <input checked="" type="checkbox"/> Sauer Danfoss Pumps | |

Performance Benefits

1. Environmentally Acceptable

Meets the requirements of the EPA Vessel General Permit (VGP 2013) for biodegradation, low toxicity and low bioaccumulation.

2. Zinc-Free

Suited for applications involving yellow metals found in axial piston pumps.

3. Long Oil Life

Good ability of the synthetic base stock to withstand oxidation at high operating temperatures can result in maximum service life for the oil relative to vegetable based readily biodegradable products.

4. Low Temperature Pumpability

Specifically developed with high viscosity index to help ensure good fluidity for low operating temperatures.

5. Premium Performance

Ashless formulation helps to provide good protection against wear of hydraulic pumps, as well as rust and corrosion protection, hydrolytic stability, water separability, foam inhibition, and filterability.

Environment, Health and Safety

Information is available on this product in the Safety Data Sheet (SDS) and Customer Safety Guide. Customers are encouraged to review this information, follow precautions and comply with laws and regulations concerning product use and disposal. To obtain an SDS for this product visit chevronmarineproducts.com.



Disclaimer. Data provided in this PDS is based on standard tests under laboratory conditions and is indicative only. Minor variations which do not affect product performance are expected in normal manufacturing. This product should not be used for any purpose other than those expressly set out in this PDS. The user has sole responsibility for verifying that this product is suitable for the user's intended application. Recommendations differ between engine manufacturers so always consult your manual. Neither Chevron nor its subsidiaries make any warranty or representation as to the accuracy or completeness of this PDS and neither Chevron nor its subsidiaries accept liability for any loss or damage suffered as a result of the use of this product other than in accordance with the terms of this PDS.