

# Clarity® Synthetic EA Hydraulic Oil 100



## **Description**

Clarity\* Synthetic EA Hydraulic Oil 100 is an ash free readily biodegradable high performance hydraulic oil that meets EPA Vessel General Permit (VGP 2013) requirements for environmentally acceptable lubricants. It is designed to give maximum protection in hydraulic equipment used on vessels and in environmentally sensitive areas.

Clarity Synthetic EA Hydraulic Oil 100 is designed to give maximum protection in hydraulic equipment used in vessels and in both mobile and stationary hydraulic pumps in high-performance industrial applications. It is formulated with synthetic base stock and an ashless, zinc-free additive system that can provide good oxidation stability, water separability, foam suppression, and protection against wear, rust and corrosion. Clarity Synthetic EA Hydraulic Oil 100 is a high VI synthetic product which allows for operation over a wide temperature range.

#### **Typical Characteristics**

| MPID                                      | 219013   |  |
|-------------------------------------------|----------|--|
| Viscosity, Kinematic cSt at 40°C          | 100.0    |  |
| Viscosity, Kinematic cSt at 100°C         | 18.8     |  |
| Viscosity Index                           | 210      |  |
| Flash Point, °C                           | 193      |  |
| Pour Point, °C                            | 48       |  |
| Copper Corrosion                          | 1b       |  |
| Rust Test, Synthetic Sea Water            | PASS     |  |
| FZG, Fail Load Stage                      | 12       |  |
| Elastomer Compatibility                   |          |  |
| Buton-N, Viton, Polyurethane              | PASS     |  |
| Biodegradability, OECD 301B, % in 28 days | >60      |  |
| Aquatic Toxicity                          |          |  |
| Fathead minnow, OECD 203, mg/L            | >10,000  |  |
| Daphina magna, OECD 202, mg/L             | >120     |  |
| Algae, OECD 201, mg/L                     | >10,000  |  |
| Bioaccumulation                           | Negative |  |

## **Recommended Applications**

Clarity Synthetic EA Hydraulic Oil 100 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.



## Clarity Synthetic EA Hydraulic Oil 100 is approved for:

| <b>✓</b> SKF      | ✓ B&V            |
|-------------------|------------------|
| <b>✓</b> Wärtsilä | <b>✓</b> Kobleco |

#### Clarity Synthetic EA Hydraulic Oil Is recommended for use in:

| ✓ Blohm+Voss | ✓ HEPR in mobile and stationary hydraulic |
|--------------|-------------------------------------------|
|              | vane- piston gear-type pumps              |

Clarity® Synthetic EA Hydraulic Oil 100 is miscible with common mineral based hydraulic oils, however, following good practice, in-service oils should be completely drained to avoid any risk of additive incompatibility and ensure that the full performance benefits are achieved. Do not use in high pressure systems near flames, sparks, and hot surfaces. Use only in well ventilated areas. Keep container closed.

#### **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 chevronmarine products.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 consulty our 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.