# HYDROL EAL

### PRODUCT DESCRIPTION:

To minimize environmental impact and protect the environment from accidental oil spills, Phoenix has developed a range of synthetic oleochemical esters-based biodegradable hydraulic oils. The HYDROL EAL range consists of readily biodegradable lubricants that meet stringent criteria for both biodegradability and toxicity.

HYDROL EAL lubricants are designed for use in high pressure industrial, marine, construction and mobile applications that are operated in environmentally sensitive areas. Use in applications that require any of the following:

- Pw1 Ultimate Biodegradability (ASTM D5864)
- OECD 301B Readily Biodegradable

- Vessel General Permit (VGM) Compliant
- EN 16807: European Standard

### **FEATURES & BENEFITS:**

- Excellent biodegradability (ultimately biodegradable)
- Low aquatic toxicity
- Good antiwear and anticorrosion performance
- Non bio accumulating

- Very high renewability content
- Excellent low temperature flow properties
- Excellent oxidation stability
- Good SRE-NBR seal compatibility

### TYPICAL PROPERTIES:

| PARAMETERS                             | TEST METHOD  | UNIT    | HYDROL EAL    |               |               |
|--|--------------|---------|---------------|---------------|---------------|
| ISO VG                                 |              |         | 46            | 68            | 100           |
| Kinematic Viscosity @ 104°F /40°C      | ASTM D7042   | cSt     | 46            | 68            | 100           |
| Kinematic Viscosity @ 212°F /100°C     | ASTM D7042   | cSt     | 8             | 10.8          | 14.5          |
| Viscosity Index                        | ASTM D2270   | -       | 148           | 149           | 150           |
| Density@15°C/ 60°F                     | ASTM D4052   | g/cm³   | TBR           | TBR           | TBR           |
| Flash Point (min)                      | ASTM D92     | °C      | 280           | 284           | 286           |
| Pour Point (max)                       | ASTM D97     | °C      | -44           | -42           | -40           |
| Copper Strip Corrosion 3 hours @ 100 C | ASTM D130    | -       | 1A            | 1A            | 1A            |
| Rust Characteristics                   | ASTM D665A&B | -       | PASS          | PASS          | PASS          |
| Foam Sequence I, II, III               | ASTM - D892  | ml      | 0/0, 0/0, 0/0 | 0/0, 0/0, 0/0 | 0/0, 0/0, 0/0 |
| Demulsibility, 54°C, 3ml emulsion      | ASTM - D1401 | minutes | 40/40/0 (15)  | 40/40/0 (20)  | 40/40/0 (20)  |

DISCLAIMER: The test data provided above is for reference purposes and is not a strict specification, as variations within acceptable production tolerances may occur. Phoenix reserves the right to update or revise this test data. For the most accurate and up-to-date information, please consult the latest version of this Technical Data Sheet (TDS).

## HEALTH & SAFETY, ENVIRONMENT:

Prolonged and repeated contact with oil may cause skin disorders. Avoid contact, Wash immediately with soap and water. Do not discharge used oil in to drains or the environment. Dispose to an authorized used oil collection point. For further Information on Safety Guidelines please refer to MSDS available on our website Phoenixlubricants.com