

PETRONAS HYDROCER SERIES

Anti-wear Hydraulic Fluids

PETRONAS Hydrocer Series are anti-wear hydraulic fluids specially developed for a wide range of mobile and industrial hydraulic equipment operating under normal to moderately stressed conditions.

Formulated with selected base oils enhanced with advanced anti-wear, anti-oxidant, anti-rust and anti-foam additives, PETRONAS Hydrocer fluids provide anti-wear protection, smooth operation of the hydraulic system and up to 2x longer lasting performance*.

*vs. minimum requirements of ISO 11158 HM for anti-wear hydraulic fluids based on TOST (ASTM D943)

Applications

PETRONAS Hydrocer Series are recommended for use in:

- various mobile hydraulic and industrial hydraulic systems operating under normal to moderately stressed conditions
- hydraulic systems demanding anti-wear fluids

Conditionally they may also be used in circulation, splash, bath and ring oiling systems feeding lubricant to gears and bearings. However please consult our local Technical Service Team and/or OEM manual before application.

For applications where high performance anti-wear hydraulic fluids are required, PETRONAS Hydraulic Series is recommended.

Features & Benefits

| Features | Benefits |
|---|---|
| Very good anti-wear protection | Protects equipment components from excessive wear and provides long equipment life |
| Very good oxidation stability | Maintains performance levels under regular temperatures and pressure |
| Very good rust & corrosion protection | Inhibits the corrosion process that occurs in presence of water, improving equipment life |
| Very good water separability | Due to water separability the system is protected from water degenerative effects, maintaining hydraulic system efficiency at required level and reducing maintenance costs |
| Very good multi metal compatibility | Compatible with most metal alloys ensuring trouble free performance of the system |
| Very good compatibility with most seal and elastomers | Compatible with most seals and elastomers, which prevents oil leaks and contamination due to seal erosion |

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Typical Properties

| Characteristic | Method | Specification | 32 | 46 | 68 |
|------------------------------------|-------------|---------------|-------|-------|-------|
| Specific Gravity @15°C | ASTM D 4052 | (1) | 0,871 | 0,877 | 0,883 |
| Kinematic Viscosity at 40°C, cSt | ASTM D 445 | ±10% | 32 | 46 | 68 |
| Kinematic Viscosity at 100°C, cSt | ASTM D 445 | ** | 5,3 | 6,7 | 8,6 |
| Viscosity Index | ASTM D 2270 | (1) | 96 | 97 | 97 |
| Flash Point, °C | ASTM D 92 | Report | 220 | 220 | 230 |
| Pour Point, °C | ASTM D 97 | ** | -12 | -9 | -9 |
| TAN, mgKOH/g | ASTM D 664 | (1) | 0,33 | 0,33 | 0,33 |
| FZG, Stages Passed | ISO 14635-1 | Min. 10 | 10 | 10 | 10 |
| Water Separability, 40/37/3 - mins | ASTM D 1401 | ** | 30 | 30 | 30 |
| Copper Strip Corrosion | ASTM D 130 | Max. 2 | 1b | 1b | 1b |
| TOST life, hours | ASTM D 943 | Min. 1000 | 1950 | 1950 | 1950 |
| Foam Sequence I, mL | ASTM D 892 | Max. 150/0 | 30/0 | 30/0 | 30/0 |
| Foam Sequence II, mL | | Max. 75/0 | 10/0 | 10/0 | 10/0 |
| Foam Sequence III, mL | | Max. 150/0 | 30/0 | 30/0 | 30/0 |

All technical data is provided for reference only and all specification based on DIN 51524-2 (2006) and ISO 11158 HM (FDIS 2008)

**Individual limits accordingly with each viscosity grade / (1): not required in specification / SS is available upon request including quality control limits

Performance Levels

- DIN 51524 Part II HLP (2006)
- ISO 11158 HM (FDIS 2008)

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Health, Safety and Environment

This product is unlikely to present any significant health and safety hazards when used in the recommended application. Avoid contact with skin. Wash immediately with soap and water after skin contact. Do not discharge into drains, soil or water.

For further detail regarding storage, safe handling, and disposal of product, please refer to product SDS or contact us at: www.pli-petronas.com

Important Note

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