

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	100
Specific Gravity @15°C	ASTM D 4052	(1)	0,866	0,871	0,875	0,878
Kinematic Viscosity at 40°C, cSt	ASTM D 445	±10%	32	46	68	100
Kinematic Viscosity at 100°C, cSt	ASTM D 445	**	5,3	6,7	8,6	11,2
Viscosity Index	ASTM D 2270	(1)	96	97	97	97
Flash Point, °C	ASTM D 92	Report	220	220	230	230
Pour Point, °C	ASTM D 97	**	-18	-15	-12	-9
TAN, mgKOH/g	ASTM D 664	(1)	0,33	0,33	0,33	0,33
FZG, Stages Passed	ISO 14635-1	Min. 10	10	10	10	10
Water Separability, 40/37/3 - mins	ASTM D 1401	**	30	30	30	30
Copper Strip Corrosion	ASTM D 130	Max. 2	1b	1b	1b	1b
TOST life, hours	ASTM D 943	Min. 1000	1950	1950	1950	1950
Foam Sequence I, mL	ASTM D 892	Max. 150/0	30/0	30/0	30/0	30/0
Foam Sequence II, mL		Max. 75/0	10/0	10/0	10/0	10/0
Foam Sequence III, mL		Max. 150/0	30/0	30/0	30/0	30/0

All technical data are 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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Safety Data Sheets are available for all our products and should only be consulted for appropriate information regarding storage, safe handling and disposal of the product. No responsibility shall be taken by either PLISB or its subsidiaries and related holding corporation for any loss or injury or any direct, indirect, special, exemplary, consequential damages or any damages whatsoever, whether in action of contract, negligence or other tortious action, in connection with or resulting from abnormal use of the materials and/or information, from any failure to adhere to recommendations, or from hazards inherent in the nature of the materials and/or information. All products, services and information supplied are under our standard conditions of sale. Please consult with any of our local representatives in the event you require any further information.