

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.

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 and 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

ALL RIGHTS RESERVED. THIS PRODUCT DATA SHEET (INCLUDING NAME, INFORMATION, LOGOS, IMAGES, PICTURES AND ICONS) WHICH RELATES OR REFERS TO PETRONAS LUBRICANTS INTERNATIONAL (PLI) IS THE SOLE AND ABSOLUTE PROPERTY OF PLI AND/OR ITS HOLDING COMPANY AND SHALL BE TREATED AS PRIVATE AND CONFIDENTIAL. NO PART OF THIS DOCUMENT MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM OR TRANSMITTED IN ANY FORM OR ANY MEANS (ELECTRONIC, MECHANICAL, RECORDING OR OTHERWISE) WITHOUT THE PERMISSION OF PLI AND/OR ITS HOLDING COMPANY.



PETRONAS HYDROCER SERIES Anti-wear Hydraulic Fluids

Typical Properties

Characteristic	Method	Specification	32	46	68
Specific Gravity @ 15 °C	ASTM D4052	(1)	0,871	0,877	0,883
Kinematic Viscosity at 40°C, cSt	ASTM D445	±10%	32	46	68
Kinematic Viscosity at 100°C, cSt	ASTM D445	**	5,3	6,7	8,6
Viscosity Index, min	ASTM D2270	(1)	96	97	97
Flash Point	ASTM D92	Report	220	220	230
Pour Point, max °C	ASTM D97	**	-33	-30	-30
TAN, mgKOH/g	ASTM D664	(1)	0,60	0,60	0,60
FZG, Stages Passed	ISO 14635-1	Min. 10	12	12	12
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	1150	1150	1150
Foam Sequence I, mL		Max. 150/0	0/0	0/0	0/0
Foam Sequence II, mL	ASTM D 892	Max. 75/0	0/0	0/0	0/0
Foam Sequence III, mL		Max. 150/0	0/0	0/0	0/0

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)
- Parker Denison HF-2

ALL RIGHTS RESERVED. THIS PRODUCT DATA SHEET (INCLUDING NAME, INFORMATION, LOGOS, IMAGES, PICTURES AND ICONS) WHICH RELATES OR REFERS TO PETRONAS LUBRICANTS INTERNATIONAL (PLI) IS THE SOLE AND ABSOLUTE PROPERTY OF PLI AND/OR ITS HOLDING COMPANY AND SHALL BE TREATED AS PRIVATE AND CONFIDENTIAL. NO PART OF THIS DOCUMENT MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM OR TRANSMITTED IN ANY FORM OR ANY MEANS (ELECTRONIC, MECHANICAL, RECORDING OR OTHERWISE) WITHOUT THE PERMISSION OF PLI AND/OR ITS HOLDING COMPANY.



PETRONAS HYDROCER SERIES Anti-wear Hydraulic Fluids

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 refers to product SDS or contact us at: www.pli-petronas.com

Important Note

The word PETRONAS, the PETRONAS logo and such other related trademarks and/or marks used herein are trademarks or registered trademarks of PETRONAS Lubricants International Sdn. Bhd. ("PLISB"), or its subsidiaries or related Holding Corporation under license unless indicated otherwise. The PLI Documents and the information contains herein is believed to be accurate as of the date of printing. PLISB makes no express or implied representation or warranties as to its accuracy or completeness or information in or any transaction performed. The PLI Documents information provided is based on standard tests under laboratory conditions and is given only as a guide. Users are advised to ensure that they refer to the latest version of these PLI Documents. It is the responsibility of the users to evaluate and use products safely, to assess suitability for the intended application and to comply with all applicable laws and regulations imposed by the respective local authorities.

Safety Data Sheets are available for all our products and should be 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 tortuous action, in connection 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 representative in the event you require any further information.

ALL RIGHTS RESERVED. THIS PRODUCT DATA SHEET (INCLUDING NAME, INFORMATION, LOGOS, IMAGES, PICTURES AND ICONS) WHICH RELATES OR REFERS TO PETRONAS LUBRICANTS INTERNATIONAL (PLI) IS THE SOLE AND ABSOLUTE PROPERTY OF PLI AND/OR ITS HOLDING COMPANY AND SHALL BE TREATED AS PRIVATE AND CONFIDENTIAL. NO PART OF THIS DOCUMENT MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM OR TRANSMITTED IN ANY FORM OR ANY MEANS (ELECTRONIC, MECHANICAL, RECORDING OR OTHERWISE) WITHOUT THE PERMISSION OF PLI AND/OR ITS HOLDING COMPANY.