

# PETRONAS HYDRAULIC HFC SERIES

## High Performance Water-glycol Fire Resistant Hydraulic Fluid

PETRONAS Hydraulic HFC Series are high performance, fire resistant, anti-wear hydraulic fluids specially developed for industrial hydraulic equipment operating under normal to moderate conditions, recommended whenever a major fire hazard exists associated with industrial hydraulic systems.

Formulated with balanced water-glycol base enhanced with advanced anti-wear, anti-oxidant, anti-rust and anti-foam additives, PETRONAS Hydraulic HFC fluids provide very good anti-wear protection, smooth operation of the hydraulic systems and contribute to mitigate the risks of violent explosions or fire in the immediate vicinity of flames or hot metal surfaces.

### Applications

PETRONAS Hydraulic HFC Series are recommended for use in:

- various industrial hydraulic systems operating under high temperatures whenever a major fire hazard exists such as die casting machines, hydraulic forging presses and hammers, machines and drive systems in the mining industry and robot welding machines

Note: PETRONAS Hydraulic HFC Series can only be mixed with water-glycol based hydraulic fluids.

### Features and Benefits

Features	Benefits
Excellent Fire resistance / High temperature applications	Reduces risk of fire in high temperature and close to open flame applications, which can ensure safer working environment
Very good anti-wear protection	Protects equipment components from excessive wear
Very good thermal and oxidation stability	Maintains performance levels under wide temperatures and pressure
Very good rust & corrosion protection	Inhibits the corrosion process that occurs in presence of water, improving equipment life
High multi metal compatibility	Compatible with most metal alloys ensuring trouble free performance of the system

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### Typical Properties

Characteristic	Method	Specification	46
Specific Gravity @15°C	ASTM D 4052	(1)	1,084
Kinematic Viscosity at 40 °C, cSt	ASTM D 445	(1)	46
pH, 20°C	ASTM D 1287	6,7 – 10,0	9,5
Appearance	ASTM E 284	(1)	Colorless to slightly yellow liquid
Foam Sequence I, mL	ASTM D 892	Max. 300/10	50/0
Pour Point, °C	ASTM D 97	(1)	-45
Water content, %	ASTM E 203	Report	42 - 44
Manifold Ignition test, °C	ISO 20823	Min. 600	700
Flash Point, °C	ASTM D 92	(1)	Not Applicable (Product with water in formulation)

All technical data is provided for reference only and all specification based on ISO 12922 / (1): not required in specification / SS is available upon request including quality control limits

### Performance Levels

- Factory Mutual Approved (Waiting by formal approval)
- HFC Fluid

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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](http://www.pli-petronas.com)

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