



HYDREX™ MV ARCTIC 15 HYDRAULIC FLUID

Introduction

Petro-Canada's HYDREX MV Arctic 15 is a premium quality, high performance hydraulic fluid designed for extremely cold temperature operations, particularly in arctic climates.

HYDREX MV Arctic 15 starts with the HT purity process to produce a 99.9% pure, crystal clear base oil. By removing the impurities that can hinder the performance of competitive conventional oils, and blending in our specialty additives, HYDREX MV Arctic 15 delivers maximum performance.

Features and Benefits

- **Developed for arctic conditions**
 - Allows hydraulic systems to start at temperatures as low as -45°C/-49°F, under no-load conditions
 - Excellent low temperature flow characteristics result in easy start-ups and faster hydraulic system pressurization
- **Outstanding anti-wear characteristics**
 - Extends equipment life for reduced maintenance and downtime
- **Strong oxidation and thermal stability**
 - Minimizes sludge and varnish deposits to ensure smooth, reliable operation of hydraulic valves and actuators
 - Helps extend the time between oil changes
- **Excellent water separability and hydrolytic stability**
 - Reusable after water is removed because HYDREX MV Arctic 15 separates readily without loss of performance additives

- **Excellent rust and corrosion protection against water damage**
 - Iron and other metal components protected against water damage
- **Inherently biodegradable as measured by OECD 301B**

Applications

Petro-Canada's HYDREX MV Arctic 15 is recommended for vane, gear and axial piston hydraulic pumps for applications requiring ISO viscosity grades 10 and 15 or SAE viscosity grades 0W, 5W or 10W. HYDREX MV Arctic 15 is also recommended for use in emergency shutdown valves or other critical low temperature heavy-duty hydraulic systems that are required to respond quickly and reliably, including extremely low temperatures down to -44°C/-47°F for automatic operated valves and -45°C/-49°F for manual operated valves.

HYDREX MV Arctic 15 is completely compatible with petroleum hydraulic fluids and polyalphaolefin (PAO) synthetic fluids and no special change-over procedures are necessary. However, to obtain maximum performance and service life benefits, systems should be thoroughly drained and flushed prior to filling with HYDREX MV Arctic 15. It is also compatible with typical seal materials and will not attack valve seals.

HYDREX MV Arctic 15 is suitable for use in equipment manufactured by:

- | | |
|-----------------|------------|
| • Eaton Vickers | • Oilgear |
| • Denison | • Hydrexco |
| • Sauer-Danfoss | • Dynex |
| • Bosch-Rexroth | • Others |
| • Racine | |

What is the HT difference?

Petro-Canada starts with the HT purity process to produce water-white, 99.9% pure base oils. The result is a range of lubricants, specialty fluids and greases that deliver maximum performance for our customers.



Typical Performance Data

PROPERTY	TEST METHOD	HYDREX MV ARCTIC 15
Start-up Temperature ¹ , °C / °F	–	-45 / -49
Operating Temperature Range ² , °C / °F (for hydraulic systems)	–	-44 to +23 / -47 to +73
Viscosity, cSt @ 40°C / SUS @ 100°F cSt @ 100°C / SUS @ 210°F	D445	13.4 / 73.6 5.2 / 43.3
Brookfield Viscosity, cP @ -44°C / -47°F cP @ -45°C / -49°F	D2983	750 10,000
Viscosity Index	D2270	400
Flash Point, °C / °F	D92	131 / 268
Pour Point, °C / °F	D5950	-48 / -54
Oxidation Stability, hours	D943	3,000
Rust Test, Procedure A&B, 24 hours	D665	Pass
Dielectric Breakdown Voltage, kV	D877	49
Four Ball Wear Test, Scar Diam. (mm) 1 hour @ 40 kg, 1200 rpm @ 75°C/167°F	D4172	0.75
Water Separability, 54°C / 129°F	D1401	40-40-0 (10)

The values quoted above are typical of normal production. They do not constitute a specification.

1 Start-up is defined by the temperatures at which the oil viscosity is 10,000 cP.

2 Operating temperature limits are determined by the equipment manufacturer. Petro-Canada has chosen to define the upper and lower operating temperatures to be the temperatures at which the oil viscosity is 13 cSt and 750 cP respectively.

Health and Safety

Petro-Canada's HYDREX MV Arctic 15 hydraulic fluid has no adverse affect on health provided it is used as directed. To obtain Material Safety Data Sheets (MSDS), contact one of our TechData Info Lines.



TechData Info Lines

To place an order, please call a Customer Order Management Representative at :

Canada (English) Phone 1-800-268-5850
(French) Phone 1-800-576-1686
United States Phone 1-877-730-2369
Latin America Phone +1-416-730-2369
Europe Phone +1-416-730-2389
Asia Phone +1-416-730-2372
China Phone +86 (21) 6362-0066

To learn more about how Petro-Canada lubricants, specialty fluids, oils and greases can help maximize your equipment performance, savings and productivity, please contact us at :

North America Phone 1-866-335-3369
Europe Phone +44 (0) 121-781-7264
Germany Phone +49 (0) 201-726-2913
Latin America Phone +1-416-730-2369
Asia Phone +1-416-730-2372
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E-mail sales@suncor.com

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Visit us on the web at lubricants.petro-canada.ca

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Beyond today's standards.

