



FLUSHING FLUID

Introduction

To maximize the performance of a heat transfer system, Petro-Canada highly recommends flushing the system prior to recharging with a new heat transfer fluid. Petro-Canada Flushing Fluid is a clear, ultra-pure fluid specifically designed as a flushing agent for heat transfer systems.

Residual fluids remaining in a heat transfer system may be oxidized. Left in place, these residual fluids can increase the acidity of a new fluid and act as a catalyst for oxidation. Petro-Canada Flushing Fluid flushes residual fluid, including residual Cleaning Fluid, from a heat transfer system prior to system recharging. It also helps displace other system contaminants such as water, loose solids and debris, and dangerous light end components that may have resulted from thermal degradation of the previous fluid.

Thus, flushing with Petro-Canada Flushing Fluid results in a cleaner and safer system environment, maximizing the performance and the service life of the new fluid, and lowering overall operating costs.

Performance Features and Benefits

- **Excellent mechanical flush**
 - Minimizes trapped, residual fluids
 - Helps to displace system contaminants including water, loose solids and debris
 - Creates a clean environment to maximize the performance and service life of the new fluid
- **Compatible with all grades of Petro-Canada's CALFLO™ heat transfer fluid**
 - Minimal impact on physical properties of most new heat transfer fluids
 - Will not add thermally unstable materials or shorten new fluid life
 - No reduction in new fluid viscosity, flash point or initial boiling point
- **Easy disposal™**
 - Can be disposed of through a number of environmentally acceptable methods such as used oil recycling or heavy fuels burning

Petro-Canada Flushing Fluid can be heated up to 500°F (260°C) to maximize turbulent flow during the flushing process. When draining hot fluid after flushing, normal safety precautions should be taken to prevent burns and the risk of fire.

Notes:

For highly fouled systems with sludge, deposits and other residues, use Petro-Canada Cleaning Fluid prior to flushing. For more information, please see the Petro-Canada Cleaning Fluid TechData sheet (IM-7939).

Systems with hard, insoluble, "baked on" carbon deposits, may require mechanical or abrasive cleaning.

What is the HT difference?

Petro-Canada starts with the patented 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	ASTM TEST METHOD	FLUSHING FLUID
Density, kg/L at 15°C	D4052	0.864
Color	D1500	< 0.5
Appearance	Visual Inspection	Clear & Bright
Flash Point, C O C, °C (°F)	D92	222 (432)
Fire Point, °C (°F)	D92	240 (464)
Viscosity, cSt at 40°C / SUS at 100°F	D445	35.6 / 183.3
Viscosity Index	D2270	97
Pour Point, °C (°F)	D97	-18 (0)
S, wt%	PCM 438	<0.001
Water Separability, 54°C, (min.)	D1401	40-40-0 (5)
Distillation, °C (°F)	D86	
10%		392 (738)
90%		500 (932)
Coefficient of Thermal Expansion, % / °C (% / °F)		0.1011 (0.0562)
Notes: CAS #	Petroleum Process Streams, API	64742-46-7

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

* Any disposal practice must be in compliance with federal, state, provincial and/or local laws and regulations.

Health and Safety

To obtain Material Safety Data Sheet (MSDS), contact one of Petro-Canada's TechData Info Lines.

TechData Info Lines

If you would like to know more about Petro-Canada Flushing Fluid, or any other product in our complete line of quality lubricants, please contact us at:

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