

# PENETRATING OIL

## Technical Data

### PenOil



Specification	Lab Tested Value	Standard Testing & Explanation
Density (kg/m <sup>3</sup> )	883.5	(ASTM D4052) Weight/Volume
Extreme Pressure Properties (lb-f)	>1,400	(ASTM D3233) Method for evaluating the load-carrying properties of lubricants.
Flash Point (°C)	>170	(ASTM D93, Procedure A) Minimum temperature that Milligan's PenOil will ignite when combined with air.
Lubricity (% improved)	29	(ASTM D6079-HFRR) Reduction in wear scar generated at point of contact between moving parts. See below.
pH	7	Neutral
Pour Point (°C)	-10	The lowest temperature that Milligan's PenOil will spray in aerosol form.
Water & Sediment (%)	<0.005	(ASTM D2709) Maximum allowable is 0.05%.

#### In-house Testing

OFITE Lubricity EP Tester	Used to test lubricating potential of a product (in normal pressure situations) between moving parts (ring and a block)	<b>20.72% reduced torque</b> when compared to leading petroleum-based commercial competitor
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#### Saskatchewan Research Council (SRC) Testing

ASTM D6079 (HFRR) High Frequency Reciprocating Rig Lubricity Results	The HFRR test determines boundary lubrication factors of fuels and lubricants. May be used to evaluate the relative effectiveness of diesel fuel for preventing wear under the prescribed test conditions of a ball and roller and at the point of contact of these two moving parts	<b>28.74% decreased wear</b> when compared to leading petroleum-based commercial competitor
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#### PetroLab

ASTM D3233 Extreme Pressure Results	Extreme pressure conditions are tested in order to simulate operating conditions (within moving part systems), that require lubrication. The higher the value of torque handled the more extreme the condition that the product can perform.	<b>10.34% increase in capacity</b> to withstand extreme load
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#### PRODUCT FACTS

- Made from non-food grade canola
- Canola is superior to other oilseed feedstock in stability

#### Natural Occurring Properties

- Solvent properties
- Lubricating properties
- Enhanced oxidative stability

#### Enabling Properties

- Solvents enable rust removing ability
- Superior lubrication allows product to penetrate into tight spaces and prevent evaporation
- Oxidative stability resists and inhibits corrosion

Please avoid long term contact with rubber and painted surfaces

**MILLIGAN BIO**  
CANOLA POWERED PRODUCTS AND FEED

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