



LOW ASH ENGINE OIL ADDITIVE



Power Up **EngineMaxxLA**™ is Specifically Engineered to:

- Reduce Downtime and Catastrophic Failure
- Enhance Fuel Economy
- Eliminate Dry-Starts
- Extend Oil Service LIfe
- Protect at Extreme Temperatures
- Reduce Corrosion
- Improve Energy Efficiency

EngineMaxxLA™ has been specifically formulated for applications requiring low ash engine oil. It is comprised of a carefully balanced, full featured additive package providing significant benefits. Ultimately, EngineMaxxLA provides the peace of mind that your equipment will efficiently perform, no matter how extreme the conditions.

Reduce Downtime & Catastrophic Failure

Advanced extreme pressure boundary additives provide unequaled protection in high load/high friction conditions. Proper lubrication under extreme conditions reduces mechanical malfunctions and failures.

Enhance Fuel Economy

Anti-Wear components control scuffing and wear under light to extreme loading conditions providing enhanced piston and cam shaft lubrication. By reducing frictional losses and minimizing wear, an increase in combustion efficiency can be realized resulting in improved power and reduced fuel consumption.

Eliminate Dry Starts

Polar anti-wear & extreme pressure additives are attracted to the polar metallic surfaces of the engine, and are able to strongly adhere providing a protective lubricating interface. This allows for significant friction reduction and protection of vital engine components during start.

Protect at Extreme Temperatures

Viscosity index improvers maintain lubricant flow and shear stability over wide temperature ranges.

Extend Oil Service Life

Anti-oxidants prevent fluid breakdown, while viscosity index improvers stabilize the oil in extreme temperatures and prevent quality deterioration. Increased protection of the basic lubricating components of the oil allows for extended fluid life.

Reduce Corrosion

Rust and Corrosion inhibitors protect against adverse effects of moisture (condensation build up in oils) and oil oxidation caused by free wear metals in the oil.

Improve Energy Efficiency

Dispersants keep contaminants in suspension and remove varnish buildup in old engines.

APPLICATIONS:

- Equipment with DPF Systems (Diesel Particulate Filtration)
- Old, High Mileage & High Hour Equipment
- Two Stroke Engines
- Natural Gas and Propane Engines

EngineMaxx*LA* is available in the following sizes:

150 mL (5 oz.) bottle

1 Litre (35 oz.) bottle

4 Litre (1 Gallon / 175 oz.) jug

20 Litre (5.5 Gallon / 700 oz.) pail

205 Litre (56 Gallon) drum

CASE STUDY: Kohut Farms - Nanton, AB

EQUIPMENT:

Kenworth T800 with N14 Cummins - Pulling a Super B Mileage @ 1,152,528 km

PRE-CASE STUDY ISSUES

- lack of power, pedal to the floor - engine works hard and runs hot
- growl in transmission at low speed
- truck runs rough

DESIRED RESULTS

- noticeable power gain and more throttle response
- temperature decrease
- less noise
- smoother operation

RESULTS AFTER ENGINEMAXXLA APPLICATION:

- More Power Than Expected
- Coolant Temperature Now Running @ Cool
- Engine Fans Not Kicking In
- Boost Pressure Up
- Starts & Runs Better



Kyle Kohut - Kohut Farms, Nanton AB





TECHNICAL INFORMATION

Product Description

- For engine oils requiring low ash content (less than 0.2%)
- Used in high-hour mobile and industrial equipment where engine oils are used in gear and hydraulic applications. Engines requiring low ash-content oils
- Provides boundary lubrication reducing friction caused by asperity (metal to metal) contact
- Engineered to reduce ultrasonic noise which is directly related to component wear
- Reduces dry starts. Protective film maintains lubrication at start
- Formulated to improve filtration by reducing the generation of large wear particles which clog the filtration system
- Developed to reduce fuel and electrical power consumption
- Adds many years of life to components

Applications: Equipment with DPF Systems (Diesel Particulate Filtration), High mileage and high hour equipment, two stroke engines, natural gas and propane engines.

Add at 3-5% or 50mL (1.5 oz.) per litre (quart)

Typical Properties

Properties	Method	Results
Appearance		Clear, Light, Amber Liquid
Color	ASTM D1500	1.5
Viscosity @ 40°C	ASTM D445	70 cSt
Viscosity @ 100°C	ASTM D445	10 cSt
Viscosity Index	ASTM D2270	129
Density @ 20°C	ASTM D941	0.96 g/mL
Pour Point	ASTM D97	-35°C
Flash Point (COC)	ASTM D92	176°C
Fire Point (COC)	ASTM D92	196°C
Acid Number	ASTM D664	1.5
Zinc and Lead Content		None
Solid particles, PTFE,		None
graphite, MoS2 content		
Copper Corrosion	ASTM D130	1a



RECOMMENDED PRODUCT APPLICATION

Formerly Known as NNL 690



ENGINE OIL ADDITIVE

Component	E NGINE M AXX
Gasoline Engines	3-5%
Diesel Engines	3-5%
Hydraulic & Gear Applications Requiring Engine Oil	3-5%

Formerly Known as NNL 690G



GEAR OIL ADDITIVE

Component	G EAR M AXX
Standard Trans. using EP Gear oil	3-5%
Standard Trans. using ATF	3-5%
Diff's/Transfer cases using EP Gear oil	3-5%
Diff's/Transfer cases using ATF	3-5%
Limited Slip Diffs (NO Friction Modifier)	3-5%
Gear Drives (w/EP Gear Oil)	3-5%

5% application rate for extreme operating conditions and innitial use.

3% application rate for maintenance service

Many 2-stroke engines require low-ash or ashless oils. In these EngineMaxx LA^{TM} should be used.

Use $GearMaxx^{TM}$ in place of friction modifier.



LOW ASH ENGINE OIL ADDITIVE

Component	E NGINE M AXX LA
High Mileage Gas Engines	3-5%
Diesel Engines	3-5%
High Mileage Diesel Engine	3-5%
Engines requiring Low-Ash / Ashless Oil	3-5%
Small, air cooled two-stroke engines	3-5%
Small, water cooled two-stroke engines	3-5%
High Hour Hydraulic & Gear Applications Requiring Engine Oil	3-5%



HYDRAULIC OIL ADDITIVE

Component	H YDRA M AXX
Automatic Transmissions	1%
Power Steering Pumps	3-5%
Hydrostatic Drives	3-5%
Powershift trans.	3-5%
Ag-tractor TDH systems	3-5%
Hydraulic Systems	3-5%
Compressors	3-5%
Hydraulics/Compressors with water separators	3-5%

Application Ratios

1% = 10ml/Litre or 0.3oz/qt

3% = 30ml/Litre or 1oz/qt

5% = 50ml/Litre or 1.7oz/qt