



data sheet

MBL8 Concentrated Oil Additive

Product Information

MBL8 Concentrated Oil Additive is an outstanding oil supplement for gasoline and diesel engines, designed to increase horsepower and fuel economy, restore compression, reduce emissions, oil consumption, engine and gear wear. MBL8 Concentrated Oil Additive consists of micro-metallic particles suspended in a base oil, together with other ingredients which provide superior lubrication, reducing friction, heat and wear. For use in Gasoline and Diesel Engines, Manual Transmissions, Differentials (not Limited Slip Differentials), Transfer Cases, Power Steering, some air Compressors and Hydraulic Systems.

Action and Benefits

There are three basic mechanisms of action.

- 1. Lubricating Action** - The product contains micro-metallic particles, spherical in shape and acting as super lubricating agents.
- 2. Filling Action** - MBL8 fills in minor grooves, scratches and pits in the component material being treated, making a smooth surface which cuts down on friction and continues to reduce wear.
- 3. Plating Action** - MBL8 plates into the surface, repairing the scarred or worn area. This process will vary depending on component application.

Regular Use of MBL8 Concentrated Oil Additive Can

- Decrease fuel consumption
- Decrease oil consumption
- Decrease smoking
- Restore compression
- Increase horsepower
- Reduce emissions
- Repair by plating into minor scratches and surface imperfections
- Extend component life
- Reduce Friction

Composition

- Micro-metallic particles
- An Anti Friction ingredient
- A Particle Suspension agent
- An Anti-Corrosion agent
- An Anti-Foam agent
- An Anti-Oxidant
- A Dispersant

MBL8 was originally designed for use in gearboxes and crankcases. MBL8 demonstrates numerous properties when mixed with lubrication fluids. The major component in MBL8 is the base lubricating oil, which acts as a carrier for the other active agents in the product.



The primary active ingredients are micro-metallic particles suspended in the base oil. The product is formulated to provide superior detergency as well as improved lubricity to the oil already in the unit. MBL8 is compatible with mineral oils and most synthetic lubricating oils. The micro-metallic particles circulate with the oil, improving heat transfer.

The detergents in MBL8 help clean the internal working parts and hence, present a clean surface for lubrication. The metal particles can then do their part to reduce friction and increase operating efficiency within the unit. The micro-metallic particles perform two major functions. First, they conform to the irregularities on the surface of the moving parts resulting in a repaired and hence, more easily lubricated surface. This same action is responsible for improving compression and horsepower in the internal combustion engine. The 'improved' wearing surface is then more effectively lubricated, even by the existing oil. Secondly, MBL8 further improves lubrication between moving parts to eliminate any metal to metal (part to part) contact, which is the major cause of internal friction and wear. The micro-metallic particles are initially spherical, much like tiny ball

bearings. In this condition, the particles are easily distributed throughout the unit. During operation the micro-metallic particles conform to surface irregularities providing superior extreme pressure lubrication with the component.

When used as directed, MBL8 Concentrated Oil Additive can greatly improve the lubricating qualities of the oil. Its unique formulation can provide important improvements in lubricity, detergency and high pressure lubrication.

Application

Allow 5000km or 100hours of operation to a new or reconditioned engine before adding MBL8 Concentrate Oil Additive, to permit initial break-in. Add immediately in all other applications.

- MBL8 contains particular materials which may settle with time, therefore it should not be mixed with very light oils due to uncontrollable and undesirable settling. Care should be taken with lighter oils.
- MBL8 contains micro-metallic particles. These particles are soft and ductile. Other metals do exist which may be equal to or more ductile and softer than those in MBL8.
- MBL8 is specifically designed for enhanced lubrication where the use of normal lubricating oils is specified. In situations where limited lubrication is required, such as in automatic transmissions, the use of MBL8 should be avoided.
- MBL8 contains particulate materials which possess particle sizes in the 1 to 10 micron range. In applications where these particle ranges may produce mechanical problems or be screened out, the use of MBL8 should be avoided.
- MBL8 in excessive doses may increase the viscosity of certain oils.
- MBL8 should not be used in limited slip differentials automatic transmissions, wet clutch or wet brake applications.
- MBL8 should not be used in ammonia compressors or in the presence of any acidic or caustic medium.
- Ensure that MBL8 is not overdosed but used in accordance with recommended dosage.

Usage

MBL8 must be shaken vigorously before using. For best results, MBL8 should be added during an oil and filter change. After draining oil and replacing filter, add the specified amount of oil less 1 litre (more for larger applications).

Mix MBL8 thoroughly with the last litre of oil. Add to the engine and operate immediately for at least 15 to 30 minutes before shutdown.

With components, i.e., manual gearboxes, differentials, etc., always ensure that MBL8 is thoroughly mixed with oil before adding to the component being treated.

Always mix MBL8 with oil before treating any component.

Recommended Dosages in Gasoline or Diesel Engines

Passenger cars and light commercial vehicles:-

- (a) With 4 cylinders, add 75mL per application.
- (b) With 6 cylinders, add 100mL per application.

(c) With 8 cylinders, add 125mL per application.

Heavy trucks, industrial, marine and commercial applications:-

- With 6 or 8 cylinders, add 250mL per application.

Large industrial and marine application:-

- 20mL per litre of engine oil.

Caution Do Not Overdose

NB: In engines with 80,000 km or more of use, it may be necessary to change the oil and filter soon after the first application, due to the detergent effect of MBL8.

MBL8 is not to be used in new or newly reconditioned engines until running in (approx 5000 kms) has been completed

Future Oil Changes

Continue the recommended oil change schedule after the first application of MBL8 adding the proper dosage listed above with each oil change.

In manual transmissions, differentials and gearboxes add 20 mL of MBL8 per litre of oil (Not for use in automatic transmissions or Limited Slip Differentials).

In large hydraulic systems, e.g., farm machinery and industrial systems add 1 part MBL8 to 250 parts oil, or 4 mL per litre.

Do NOT use in torque converter systems or with clutches or brakes that operate in oil.

For small engines such as 4 stroke mowers and industrial engines add 20 mL per litre or 1 part MBL8 to 50 parts engine oil.

Specifications

Specific Gravity @ 15.5°C (60°F) (H ₂ O =1).....	1.1
Flash Point (C.O.C.).....	216°C (420°F)
Pour Point.....	-12°C (10°F)
Boiling Point.....	Above 210°C (410°F)
Viscosity SUS @ 37.8°C (100°F) with MBL8	64.5
Appearance and Odour: Metallic Brown. Mild oil odour	

Handling

Product contains petroleum oil, and micro-metallic particles. Do NOT store near heat, sparks or flame. Wash with soap and water after skin contact with product. KEEP OUT OF REACH OF CHILDREN. A Material Safety Data Sheet is available from Home Office.

Warning

Do NOT take internally. Harmful or Fatal if swallowed. Contains micro-metallic particles and hydrocarbons. If swallowed contact a doctor immediately. Wash hands with soap and water after use or skin contact.

Medical Advice

Contains petroleum oil, and micro-metallic particles. If swallowed, do NOT induce vomiting. Call physician immediately.

Availability

250 mL and 4 litre Containers.



Pro-Ma Systems (Canada) Inc. / Pro-Ma Systems (USA) Inc.

#120, 6330 12th Street S.E. Calgary, Alberta T2H 2x2 Canada.

Toll Free: 1-800-615-3380 Fax: (403) 252-3161

E-mail: pro-ma@nucleus.com Web Site: www.pro-masystems.com

Independent Distributor