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MBL-8 Concentrated Oil Additive

This unique Product has the capacity to enhance the lubricating capability of Mineral, Mineral/Synthetic and full Synthetic Engine Oils, Manual Transmission Oils, Conventional Differential and Transfer Case Oils. Do not add this product to Automatic Transmission Fluids.

MBL-8 Concentrate can do the same for Mineral Oils in Hydraulic Systems used in Power Steering, Fork Lift, Tractor and Harvester hydraulics. It is <u>not</u> compatible with Vegetable based oils, nor Ethylene Glycol Hydraulic Clutch and Brake Fluids.

Let's look at the eight individual Features and Benefits of MBL-8 Concentrated Oil Additive, and how they perform their respective functions in lubricants.

- The Carrier Oil is an extreme pressure oil that is compatible with all the ingredients, and with all Mineral Oil, Mineral/Synthetic and full Synthetic engine and gear oils, as well as Mineral based hydraulic oils. It assists in increasing the load carrying capacity of the lubricant to which it is added.
- 2. The Micro-Metallic Copper and Lead Particles. These particles are the pure base metal, and range in size from 1-10 microns (one micron = one millionth of a Metre. This equates to four, one hundred thousandths of an inch). In easier to understand terms, one hundredth the diameter of an average human hair. These particles make up a small percentage of the compound, and are small enough to pass through almost all genuine Oil Filters, which usually screen between 15-50 microns.
- a) The Copper Particles travel around with the lubricating oil through the oil galleries passage ways and hydraulic tappets (where fitted), helping to keep them clean, and becoming embedded in all component surfaces under load. They also become embedded in minute scratches, and help to reduce weepage at oil seal locations. Copper is one of the best conductors of heat, so the particles help to transfer heat to the ambient air. Components run cooler, unless the operating temperature is maintained by a thermostat.
- b) **The Lead Particles** are manufactured from pure Galena. Lead has been known for ages as one of the best lubricants for machinery. These particles also plate into bearing surfaces, valve train and other components under pressure, reducing friction, wear, heat and noise. They provide vital lubrication during start-up, even if the engine oil has drained away during shut-down.
- 3. **The Detergent** component helps the basic lubricating oil's detergent to keep the mechanisms free from sludge, varnish and gum deposits.
- 4. **The Dispersent** component holds sludge and solids that have not been filtered from the oil, in suspension; so that they can be drained during the next Oil Change. This is

- why the MBL-8 Concentrate should be added to the Oil at each oil change interval.
- 5. The Anti-Oxidant maintains the quality of the oil for a longer period. Oil oxidises as it reacts with the oxygen in the air. The hotter the oil becomes, the faster the oil oxidises. At the same time its viscosity reduces. Whilst MBL-8 Concentrate can maintain oil quality for a longer period, we do not recommend extending Manufacturers' recommended oil change interval schedules.
- 6. The Anti-Foam Agent helps resist oil's tendency to foam when it is churned by high speed machinery. Once oil foams. It loses a lot of its load carrying capacity. The most common Anti-Foam Agent is a 10 micron silicon ingredient. Oil filters that screen below 10 microns can remove some of his ingredient. Always use the Manufacturer's genuine Oil Filter.
- 7. The Anti-Corrosion Agent assists similar ingredients blended into the Oil during manufacture. Sulphurous, Sulphuric and other Acids form during the combustion process, and can attack engine and gear components. Extreme Pressure lubricants often contain Sulphur, Chlorine, Lead, Phosphorus and Zinc. New oil is blended so that the Alkalinity (Total Base Number) matches the percentage of Sulphur in the fuel. When the oil becomes pH Neutral, it loses its ability to neutralise corrosive acidity, and it should be changed.

MBL-8 CONCENTRATED OIL ADDITIVE is mixed with engine oils in proportion to the number of cylinders in an engine, and the type of engine - Car, Truck, Tractor, Industrial and Marine, as shown on the package Labels. The small percentage of MBL-8 Concentrate does not downgrade Synthetic or Mineral/Synthetic oils. For use in Manual Transmissions, Conventional Transmissions and Differentials, and Transfer Cases, the dosage is 20mls per litre of lubricant. For use in Hydraulic Systems using Mineral Based oil, the Dosage is 4mls per litre of lubricant, which should be mixed with up to one litre of the lubricant and added slowly whilst the pump is running.

MBL PRE-MIX OIL ADDITIVE contains all of the above ingredients, but it has an engine oil base. It should only be used in engines, and only mixed with Mineral Oil. The volume and grade of fluid in MBL PRE-MIX can downgrade Mineral/Synthetic and Full Synthetic Engine Oils.

Operate all engines and equipment for at least 15 minutes after adding MBL products, before engine shut-down.

2006 updates of MATERIAL SAFETY DATA SHEETS are now available, and can be ordered on an individual basis via Email or hard copy, from Customer Services Department for applicable Pro-Ma Performance and Home Products. They may be required by Government Departments, Local Council and Fleet Owners. **Do not** supply them with **expired copies**.