



Enviro-Save® Global Distribution

ENGINE AND POWERTRAIN PROTECTION METAL TREATMENT

The Enviro-Save Product Line

The Enviro-Save Metal Treatment proprietary products have been technically formulated to ensure safety and compatibility for all applications and to obtain the ultimate in treatment performance. The following products contain specially prepared micro-resin particles and some, where necessary, include specially selected cleaning complexes to adequately remove contaminants from the bearing surface asperity, enabling the micro-resin particles to become a permanent impregnation in the bearing surface.

When used as directed, all products are guaranteed to reduce wear.

- Powertrain Protection Kit
- Gas Engine Treatment - 4-Stroke
- Gas Engine Treatment - 2-Stroke
- Diesel Engine Treatment
- Gear Box/Differential Treatment
- Automatic Transmission Treatment
- Compressor Treatment
- Hydraulic System Treatment
- Heavy Duty Grease
- Assembly Lube



All Products are backed by Insurance from **AON** and Lloyds of London, protecting your interests.

Enviro-Save Global Distribution
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“One Time Investment - One Time Treatment = Life Time of Savings”

A Scientific Oil Sample Analysis before and after treatment will confirm reductions in metal-wear content.

Proven performance that puts your return of investment (R.O.I.) into the 1000's of % Percent.

Since 1990, offering:

- Reduced engine wear and friction
- Reduced sludge and carbon build up
- Reduced harmful engine exhaust
- Reduced operating temperatures
- Reduced blow by
- Reduced operating costs
- Increased fuel savings
- Increased performance
- Increased life of engine
- Increased dry start protection

Quality product you and the environment can trust.



GUARANTEED TO REDUCE FRICTION & WEAR • VERIFIED BY EPA & SAE CERTIFIED LAB

THE PRODUCT

Enviro-Save Engine & Powertrain Protection Metal Treatment is a proprietary product that imparts an ultra-low friction property to the bearing surfaces of all moving parts in engines and machinery. The treatment becomes resident in the surface asperity, permanently.

All **Enviro-Save** products are thoroughly researched and technically formulated to provide the safest and most compatible treatment for each type of component being treated. We believe that today's lubricants are sophisticated products that create an optimum antifriction environment within the performance limits of any separately applied medium. However, it is still possible to obtain extra benefits in the sphere of friction reduction by changing the nature of the bearing surface. This is how one application of **Enviro-Save** Metal Treatment achieves reductions in friction and wear. Oil sampling before and after treatment will show reductions in metal-wear content. A 50% reduction in wear rates is common. Treated engines also show reduced sludge and carbon build-up.

Enviro-Save products are not "oil additives", which by design alter the characteristics of the lubricant (oil or grease). Our product uses the engine's oil to transport the **Enviro-Save** treatment, yet does not change the effect of these fluids or alter their characteristics.

Unlike oil additives, **Enviro-Save** Metal Treatment permanently impregnates the valleys of the engine surface, thereby NOT changing the oil system capacity or creating any type of cubic displacement.

BENEFITS TO YOU

Although the benefits may vary depending on the mechanical condition of the vehicle or equipment being treated, **Enviro-Save** Metal Treatment products are GUARANTEED TO REDUCE WEAR when used according to manufacturer's instructions. The multiple benefits from reduced friction/wear in mechanical components:

- Reduced Emissions
- Fuel Savings
- Increased Horsepower/Performance
- Dry-start Protection
- Reduced Oil Consumption
- Storage/Corrosion Protection
- Easier Starting
- Less Vibration
- Noise Reduction

All these benefits and more extend the life of your vehicle or equipment and reduce your operating costs.

This equates to **Enviro-Save** Metal Treatment being COST EFFECTIVE.

BENEFITS TO THE ENVIRONMENT

Environment Canada states that over 70% of our present air pollution is caused by exhaust emissions from automobiles and equipment. We can all help reduce pollution by using **Enviro-Save** Metal Treatment products. Extending the life of mechanical components reduces the consumption of earth's non-renewable resources. Reducing fuel consumption automatically reduces the volume of exhaust emissions and at the same time conserves our non-renewable fossil fuels.

REDUCED EMISSIONS

Enviro-Save Metal Treatment reduces exhaust emissions by lowering fuel consumption, improving combustion and burning less oil. Experience with this product shows that exhaust emission reductions in hydrocarbons, carbon dioxide and diesel engine opacity can be achieved depending on the mechanical condition of the engine before treatment. A 20% - 50% reduction in emissions is very common.

FUEL SAVINGS

Enviro-Save Metal Treatment reduces fuel consumption. Common results from Class 8 Trucks treated with the Powertrain Protection Kit have shown reductions in fuel consumption of 10% - some higher. New engines return lower figures given they are still operating in maximum cylinder efficiency.

Fuel savings depend on how the vehicle is driven. Continue to drive at your normal pace and you will see a fuel savings that is connected to the enhanced mechanical efficiency of your vehicle. However, if you are a performance driver that wants to take advantage of the improved power train for faster acceleration and / or speed, your fuel savings will not be the same. The trade off for faster acceleration is likely a welcomed benefit.

REDUCED WEAR/LONGER LIFE

Enviro-Save Metal Treatment reduces wear. A 50% reduction in wear rates is common, but this can vary with service hours/distance on the unit treated. Oil sampling before and after treatment will show the reduction in metal-wear content by analysis. To obtain truly comparative results, it is very important to be consistent in the service hours/mileage on the sample oil and in the method of extracting the oil sample. The best method for obtaining true, representative samples

is to always take them when the oil is hot and the engine is running. This requires a special sampling valve to be installed at an oil pressure point. Alternatively you can use a portable sampling pump for extracting directly from the sump via the dipstick tube.

INCREASED HORSEPOWER/PERFORMANCE

Enviro-Save Metal Treatment improves power output from engines in two ways: 1) by reducing friction horsepower and 2) by restoring engine output through recovery of compression. Dynamometer tests performed on trucks, buses and race cars after treatment confirm that an increase of 5% to 10% in horse-power is common. As operating time increases on engines, wear particles and dirt such as carbon, varnish and dust accumulate on cylinder walls, rings and ring grooves. This will eventually lead to blow by and reduced compressions.

Enviro-Save Engine Treatment has a very effective cleanser which will clean out and disperse these deposits. As the ring grooves are cleaned and the treatment progresses, blow by is reduced, and compression restored or normalized. Balanced compressions improve efficiency.

Enviro-Save Engine Treatment often shows its effect by an increase in idle RPM. This is due to less friction throughout the engine and normalized compression. However, higher idle RPM will only be experienced on carburetor-equipped engines. Fuel-injected diesel and gas engines with their idle at a fixed RPM will not see this effect.

Many racing drivers have also experienced an advantageous increase in top-end RPM.

NOTE: Like engine manufacturers, we do not recommend exceeding "redline" limits.

LOWER OPERATING TEMPERATURES

Enviro-Save Metal Treatment reduces the heat passing into the cooling system due to lower cylinder wall friction and less fuel being burned.

Similarly, by friction reduction it reduces the heat passing into the lubricating oil, as indicated by the temperature gauges in transmissions, gears, bearing housings and air-cooled engines. Engines that are thermostatically controlled in coolant and / or lubricating oil will need to test temperature-rise across each system in order to assess friction heat reduction. It is common to reduce oil operating temperatures in commercial trucks from 200°F to 40°F. That is a significant amount of heat taken away from to Global Warming.

EASIER STARTING

Enviro-Save Engine Treatment will enable an engine to turn over more easily and faster. The starter will use less cranking power thus benefitting the starter motor, battery and alternator, especially in cold climates.

REDUCED OIL CONSUMPTION

Enviro-Save Engine Treatment normally reduces oil consumption, sometime by as much as 50%. However, this benefit would not normally be felt in a previously overheated or high wear engine where oil consumption is due to excessive clearances at piston rings and valve seals or has other mechanical damage. Normal oil consumption takes place due to oil burning. This occurs mainly where the oil is exposed to heat from combustion, usually at the upper end of the cylinder where it is trapped in the pore structure of the cylinder walls, around the upper piston rings and grooves. When the **Enviro-Save** Engine Treatment is established, the oil-retaining porous surface finish has become a resin-filled structure. This "smooth" surface now lowers oil retention and so reduces oil lost to combustion heat. Oil consumption is also improved by the release of sticking piston rings achieved by the cleaning action of the treatment.

STORAGE/CORROSION PROTECTION

Enviro-Save Engine Treatment exceeds lubricants by providing permanent protection against corrosion damage on bearing surfaces caused by moisture, air or acids. It provides excellent off-season protection where equipment or vehicles are idle or stored for long periods.

SMOOTHER/QUIETER OPERATION

Enviro-Save Engine Treatment contributes to smoother-running equipment. Reduction of friction and normalizing of compression results in the smoothing-out of the mechanical motions in machinery and reciprocating engines. This smoothing-out signifies a reduction in the vibrations which can be an insidious cause of component wear/failure. **Enviro-Save** Engine Treatment reduces noise levels by reducing vibration. In industrial applications this feature could be beneficial to the workplace environment.

EASIER GEAR SHIFTING

Enviro-Save Engine Treatment will enhance the shifting of manual and automatic gears which are hard or sticky to operate. Freedom of shifting will improve with operating time and transmissions will run cooler and quieter.