PRODUCT INFORMATION SHEET

WYNN'S EMISSION CONTROL
Product Number: 67902 205 litre

WYNN'S EMISSION CONTROL is a patented, ashless fuel additive that significantly reduces hydrocarbon and carbon monoxide exhaust emissions in gasoline and diesel engines, while providing improved power and fuel economy.

Wynn's Emission Control also significantly reduces particulate/smoke exhaust emissions from diesel engines and alleviates "rotten egg" odour from gasoline engines with catalytic converters.

Advantages

Governmental agencies have enacted laws and are ready to enforce strict penalties to regulate the black smoke contaminants that are emitted by diesel engines. Diesel operators are investigating various concepts to reduce these black smoke contaminants. The need has never been greater to "keep it simple" for diesel operators who must meet the new strict regulations or pay substantial penalties. Drastic engine changes, exotic alternate fuels, or significantly changing refining conditions for fuels to reduce diesel black smoke and particulate emissions, all carry heavy cost factors.

The internal combustion engine is inherently inefficient. Only a small fraction of the gasoline that burns is converted into useful power to move the automobile. The remainder of the energy is dissipated in the form of heat and vibration, or is used in overcoming friction between the engines moving parts. Some of the gasoline that enters the combustion chamber is not completely burned and passes out of the exhaust pipe as hydrocarbons (HC) and carbon monoxide (CO), the two major components of air pollution and smoke. In diesel engines, black smoke is a sign of poor combustion efficiency.

An improvement in the efficiency of combustion inside the engine could result in substantial savings of petroleum fuel and a significant reduction in air pollution.

Wynn Oil Company has formulated in USA a patented, EPA registered, totally organic, non-metal containing fuel supplement called Wynn's Emission Control. This fuel supplement accelerates combustion, providing instant results.

Wynn's Australia Pty Ltd, 100 Hassall Street, Wetherill Park NSW 2164
Tel: (02) 9828 0900 Fax: (02) 9725 4698
Email wynnsaus@wynns.net Website www.wynns.net
ABN 73 000 370 150

When added to fuel, Wynn's Emission Control significantly increases vehicle mileage, horsepower, and engine performance. Whilst accomplishing all the aforementioned benefits, it also will reduce black smoke particulate emissions by as much as 30-50%, or even more in some instances.

Wynn's Emission Control removes water from the fuel system. Less soot enters the oil, reducing abrasive wear. Reduced oil thickening and abrasive wear will improve engine performance which translates into less maintenance and down time.

All of these benefits have been proven in actual fleet service by operators testing this product, as well as laboratory testing. The facts show that by using Wynn's Emission Control, money will be saved through improved engine performance, reduced fuel consumption, and less maintenance.

Benefits

Wynn's Emission Control has been specifically formulated with Wynn's Fuel Combustion Catalyst W15-590® to provide the following benefits.

- INCREASES FUEL ECONOMY.
- WORKS IN DIESEL OR GASOLINE ENGINES.
- IS COST EFFECTIVE.
- REDUCES PARTICULATES AND EMISSIONS.
- REDUCES BLACK SMOKE.
- REDUCES SOOT IN ENGINE OIL.
- IMPROVES POWER AND PERFORMANCE.
- SAVES FUEL AND REDUCES AIR POLLUTION.
- ELIMINATES INJECTOR AND VALVE DEPOSITS.
- REDUCES PREVENTATIVE MAINTENANCE COSTS.
- DISPERSES WATER AND KILLS BACTERIA.
- PROVIDES INSTANT RESULTS.
- PATENTED AND EPA REGISTERED IN U.S.A..
- SAFE FOR OXYGEN SENSORS AND CATALYTIC CONVERTERS.
- DOES NOT CONTAIN MINERALS, METALS OR ALCOHOL.

Wynn's Emission Control provides benefits that have been proven by results, some of which are as follows:-

- In a controlled field test involving a fleet of 74 trucks using diesel fuel, the control group showed a 7.0% fuel economy increase.
- Other field tests included a fleet of 144 buses, which improved fuel economy by 5.8%.
- A test group of 28 trucks showed a dramatic 8.5% fuel economy increase.
- Another test of 27 trucks shows an even more substantial 9.9% increase in fuel economy.
- Tests using a one cylinder engine operating at a constant 1200 RPM showed an overwhelming 73% reduction in the carbon fraction of its particulate emissions.

The use of Wynn's Emission Control can avoid the costly need to change refining conditions for fuels to reduce black smoke and particulate emissions. Wynn's Emission Control provides an environmentally conscious answer to air pollution.

Wynn's Emission Control uses stabilized organic peroxide, recognised for its ability to provide additional combustion oxygen after engine combustion temperatures and pressures are reached.

Any internal combustion engine operating on either diesel or gasoline will benefit from the use of Wynn's Emission Control. The product has been field proven at low temperatures and high altitudes, including heavy duty mining and off road equipment.

Applications

Wynn's Emission Control is recommended for all gasoline and diesel engines.

For bulk treatment of fuel, use at 0.6% volume treat rate.

Use regularly for maximum reduction of pollutants, and for optimal fuel economy and power.

Typical Characteristics

Appearance	Clear Thin Liquid
Colour (Visual)	Light Amber
Colour (ASTM D 1500)	1.5
Density @ 15°C	0.851 (ASTM D 4052)
Flash Point (PMCC) °C	39 (ASTM D 93)
Freeze Point (°C)	-40
Volatiles (% Vol)	92.2

Fuel Economy Tests

CUMMINS N14 ELECTRONIC DIESEL ENGINE
KALARI TRANSPORT - MELBOURNE 10/12/99.

Test Objectives and Format

The objective of these tests was to measure changes in the fuel efficiency performance of a modern diesel engine operating in a typical heavy road transport fleet environment when its fuel was treated with Wynn's Emission Control with Lubricity in a 0.6% concentration. In consultation with Wynn's Australia Pty Ltd, it was resolved that the schedule should include four separate tests: an initial baseline to establish performance levels with untreated fuel, a test within two weeks of treated fuel being introduced to the vehicle, a second test after a further month of operation on treated fuel and a final baseline retest after two weeks of the vehicle running again on untreated fuel.

Test Method

The vehicle chosen was from Kalari Transport's fleet, used for daily return Melbourne - Ballarat.

Testing was carried out at the Cummins test facility at Laverton North, using their rolling road dynamometer which is equipped with a computerized fuel consumption measuring system. This system is interposed in the test vehicle's fuel supply circuit, so that all engine supply and return fuel flows via a small fuel tank support on a load cell. By this method, the net fuel consumption (by mass) can be accurately measured over a time period while the engine power output is simultaneously recorded.

Details of Test Procedures

In order to achieve a representative sample of engine operating conditions, data was collected at two engine speeds, 1200 rpm and 1650 rpm; and two load conditions, wide open throttle and a part throttle conditions achieved by placing an artificial stop beneath the throttle pedal. This rendered a total of four engine operating conditions being monitored in each test.

The dynamometer at the Cummins facility was operated in "speed mode" where by the load is varied to maintain a designated target engine speed (or road speed). In recognition of the large static vehicle mass and high axle torques being dealt with in this situation, the dynamometer's control system has a quite gentle rate of load regulation and a correspondingly high time constant. The result at a stably loaded operating condition is that the engine and road speed vary up and down by some ±1% with the torque (load) figure varying in a similar but reciprocal fashion. In order to avoid errors which might be introduced when taking a single power reading at the end of a fuel consumption test period, it was decided to visually record the displayed power figures every 3 seconds during the consumption tests and then average these figures.

Results

Based on the average of all additive vs non-additive tests, there are significant improvements in fuel efficiency shown for three of the four operating conditions. These are respectively:

1700 rpm W.O.T.	-	3.7%
1200 rpm W.O.T.	-	2.8%
1200 rpm P.T.	-	2.7%

The 0.6% calculated improvement shown for 1700 rpm Part Throttle cannot be considered significant as it falls within the window of possible experimental error.

Comments and Conclusions

As observed above, a significant improvement in fuel efficiency was observed at three of the four load conditions tested. An explanation as to why a similar improvement was not observed in the fourth case may be found in the fact that 1700 rpm and 200 hp is a low torque, high air consumption condition, and thus will have the highest concentration of free oxygen (in the combustion chamber) of the four load conditions. It suffers high friction losses combined with low IMEP (and therefore low combustion temperatures) as borne out by its poor specific fuel consumption. In such conditions an oxidation promoter may be relatively ineffective.