# TECHNICAL INFORMATION

# **Commercial White Paper**





# Fuel Factor X™

## Distributed by MyDailyChoice, Inc.™ Inc.

This document is intended to introduce Fuel Factor  $X^{\mathbb{M}}$  to industrial and commercial users in the trucking, transportation, mining, construction and power generation industries globally. This product, which is distributed by MyDailyChoice, Inc. is a multi-purpose and comprehensive fuel treatment which has been extensively tested in various businesses and industries and has proven to result in positive economic, operational and environmental benefits. The use of this product has been deployed on a worldwide basis in multiple sectors of the transportation, mining and power generation industries and has produced significant results in all benefit categories.

Exhaustive testing and subsequent results were aimed at proving four value propositions:

- Operational: Fuel economy and engine efficiency
- Environmental: Non-hazardous solution for reduced emissions
- · Maintenance: Decreasing costs and capital expenditures for assets: increasing asset availability
- Economic: Overall net savings directly impacting the bottom line

Although all four areas have been evaluated, the tests were focused mainly on a combination of the quickest and most measurable value propositions that directly impact the bottom line (fuel economy) and the environment (reduced emissions).

### Fuel Factor X™

Fuel Factor  $X^{\text{TM}}$  was initially developed by a Fortune 500 laboratory to solve the issues surrounding the storage of fuels for stand-by power systems. Engines are often negatively impacted by the quality and variance of fuels. Fuel Factor  $X^{\text{TM}}$  addresses these issues by returning to, or keeping fuels within, international (ASTM and ISO) specifications.

With the addition of the latest in organo-metallic catalyst chemistry to improve overall combustion efficiency, **Fuel** Factor  $X^{\text{TM}}$  has evolved to meet additional business needs and requirements. The addition of an advanced synthetic lubricity agent to counter the effects of low sulfur fuels on engine components completes the product's applicability to the transportation sector.

# The result is a comprehensive, highly tested, patented fuel treatment formulation that can deliver tremendous value to all fuel consuming industries.

MyDailyChoice's Fuel Factor X™ occupies a unique position in the market, as it delivers considerably more value than conventional single purpose fuel additives. The following represent the main functional components:

- Combustion catalyst and burn-rate modifier;
- Acts as a cetane improver to lower the ignition point;
- Reduces emissions, including soot, CO, NOX and THCs (total hydrocarbons);
- Demulsifies, moving water from the fuel;

- Acts as a lubricator and detergent;
- As a dispersant, eliminates any existing solids in the fuel;
- As a polymerization retardant, prevents the further formulation of solids;
- Retards internal corrosion and breakdown of fuel tanks;
- Prevents catalytic oxidation as a metal deactivator;

Fuel Factor  $X^{\infty}$  is soluble in all fuels and fuel oils, is non-hazardous, and requires an extremely low treatment rate, as 1 U.S. gallon treats 10,000 U.S gallons of fuel (1/4 ounce treats 20 gallons of fuel). Detailed product information can be found in Exhibit A − Product information, Exhibit B − MSDS (Material Safety Data Sheet), and Exhibit C − Frequently Asked Ouestions.

# Impact of a "Better Burn"

When evaluating the combustion process, the better the 'burn' of the available fuel, the more  $CO_2$  gas results, and the more horsepower is generated. The result is improved fuel economy. Measurements of these combustion bi-products can attest to the impact of the burn rate modifier:

Fuel = Carbon  $\rightarrow$  Particulate matter (soot) + HC  $\rightarrow$  CO  $\rightarrow$  CO<sub>2</sub>

This process shows that the more complete the burn of the fuel, the further to the right the amounts measured will increase. Fuel breaks down into carbon, which is measured as particulate matter (soot) and unburned hydrocarbons (un-burned fuel). The other gases are increased if the fuel is burned more effectively.

Continual testing includes the measurement of the bi-products before and after the use of **Fuel Factor X** $^{\text{M}}$ . Observations were noted regarding the reduction of carbon on key engine components, indicating a better burn. The decrease in particulate matter and unburned hydrocarbons (HC) means better emissions. It is important to note that **Fuel Factor X** $^{\text{M}}$  positively affects the process, and does so at a lower temperature of activation of combustion. This has a secondary effect of decreasing NOX when the engine is properly maintained and the air-fuel mixture is set to the correct specification.

# Impact of Lubricity

Recent legislative changes to reduce sulfur content in fuels have meant a decrease in the inherent lubricity of diesel fuels. Experts estimate that as much as 50 percent of today's ULSD (ultra-low sulfur diesel) pool will need a lubricity improver to meet engine manufacturer's specifications and that up to 75 percent of the diesel pool could require treatment as refiners convert to ULSD production in 2006 and beyond.

Fuel Factor X<sup>™</sup> includes a synthetic lubricity agent that addresses the Engine Manufacturers Association (EMA) preferred diesel fuel lubricity specification, the FQP-1.

The ASTM D-6079 diesel lubricity specification test balances input from engine makers, standards officials, and fuels producers. It says that a "wear scar" no larger than 520  $\mu$ m (microns) in diameter should result from a standardized wear test. The lubricity agent in FFX<sup>TM</sup>, when analyzed under the ASTM D-6079 test specifications produced a wear scar of only 440  $\mu$ m, far exceeding the requirements for lubricity specifications required by engine manufacturers.

# Fuel in Storage

Fuel Factor  $X^{\text{TM}}$  deals with all of the issues surrounding fuel stability in storage. A number of factors have been identified that lead to the contamination and deterioration of fuel. This means that it will slowly separate out of ASTM specifications, negatively affecting combustion, and contributing to harmful emissions. Fuel Factor  $X^{\text{TM}}$  removes water, prevents molecular chaining of hydrocarbons, prevents catalytic oxidation of the fuel, prevents corrosion of the tanks eliminating particles, and loosens up existing sludge build-up.

# Warranty Issues

When considering changes to the combustion process, there is concern regarding the impact on the mechanical operation of the engine, and the OEM warranty. Fuel Factor  $X^{\text{m}}$  does not affect the mechanical operation of the engine; it deals with the specification and capability that the fuel delivers.

It is standard practice for OEM's to neither endorse, nor condemn the use of after-market treatments or fuel additives. The use of a fuel additive, in itself, does not void any manufacturer's warranty. Several manufacturers offer their own application specific additives, or diesel fuel conditioners. The Magnuson-Moss Warranty Act (US Code – Title 15, Chapter 50, Sections 2301-2312) prevents an engine manufacturer from voiding a warranty on a vehicle due to an aftermarket part or treatment, unless they can prove that the aftermarket part or treatment caused, or contributed, to the failure of the vehicle.

Fuel Factor X<sup>™</sup> has a history within the transportation sector. Users have reported no negative long-term effects resulting from treating fuel. This includes users of the product over many consecutive years in bussing, locomotive/railroads, transit, ocean-faring ships, mining, and trucking fleets. None has reported an issue surrounding warranty coverage.

# Summary

The need to conform to recognized standards has been met by holding Fuel Factor  $X^{\mathbb{M}}$  up to the scrutiny of extensive laboratory and practical testing.

- Fuel Factor X<sup>™</sup> has achieved ASTM D975 and ISO fuel specifications;
- The EPA has approved the product through its comprehensive registration and evaluation process (#217020001 per CFR 79.23) (see exhibit D EPA Registration);
- Under the testing required by the American Trucking Association, the SAE J1321 TMC/SAE Fuel Consumption Test Procedure Type II, Fuel Factor X<sup>™</sup> achieved an 8.2% fuel economy improvement. This test was conducted by an independent lab under rigid test protocols to ensure a test accuracy of ± 1%.
- That the inclusion of the lubricity agent has ensured that Fuel Factor X<sup>™</sup> meets the Engine Manufacturer's standard FQP-1 for lubricity;

Due to the benefits the product offers, and the multiple value propositions that it delivers, organizations that deploy many varying pieces of equipment and require large amounts of fuel would be in a position to recognize the greatest return.

# **Case Studies**

### General

Following the initiation of discussions with the test company in the fleet management organization, it became apparent that there was a need to perform tests on varying vehicles to prove the value, and the comprehensive nature, of **Fuel Factor X** $^{\text{TM}}$ . This resulted in the decision to test different types of vehicles.

Prior to the initiation of the test of MyDailyChoice Fuel Factor  $X^{TM}$ , time was taken with the appropriate personnel to confirm the validity of the product and its affect on the fuel systems in question. A number of references were contacted, and a methodology was established to offer the best 'over the road' fuel test procedures. A qualified third party technician would be necessary to analyze the effects of the solution on the engine efficiency and would also provide measurements regarding emissions.

### **Test Procedures**

It was decided to test the product on two vehicles operating with different engines, one diesel and the other gasoline powered. In order to measure the effect of **Fuel Factor X** $^{\text{TM}}$  on the two vehicles, a baseline mile per gallon was established through analysis of recent fuel records. The drivers and mechanics were also provided an opportunity to offer their feedback.

# **Findings**

The following are the results of the tests conducted on the diesel and gasoline powered vehicles operated under the Fleet Management unit of the test company. As a solution offers a number of value propositions, each has been separated to provide detailed analysis.

- Fuel Economy and Engine Efficiency: Starting in January and running for six weeks, Fuel Factor X™ was deployed in two roving mechanic's vehicles, one a GM Diesel and the other a Ford gas powered truck. Research indicated that the diesel vehicle averaged 12.4 miles per gallon, and the gas powered vehicle 9.1 miles per gallon. Following compilation of six weeks of test data, it was determined that the vehicles averaged a 12% improvement in fuel economy. This result was achieved despite very poor weather conditions. The drivers also noted that their vehicles started without hesitation compared to others who had difficulties in the same harsh temperatures. During the same period, results for other testing efforts working with Fuel Factor X™ included a 9.34% improvement for a long-haul trucking group, a 7.2% improvement for large trash and recycling service, and a 7.0% improvement for a long and short haul freight logistics company. Engine efficiency on the test vehicles improved by 21% as a result of a better burn of the fuel.
- Environmental: The Fuel Factor X™ is a non-hazardous fuel treatment. Within the composition of the product, there are no carcinogenic chemicals that effect handling, and there is no alcohol that would dry out the chamber and injectors. It can easily and safely be transport, handled and stored. Regarding the tests, emissions decreased as a results of the amount of fuel being used that was treated with FFX™. As all the tests have proven, the better burn of the existing fuel means better fuel economy, and better emissions. The chemical process with the correct air/fuel mixture would result in lower NOX emissions when the fuel is treated with FFX™.

- Maintenance: The composition of FFX™ includes a number of components aimed at improving efficiency by affecting the fuel and cleaning/lubricating the entire fuel system. As a result, the solution assists in lubricating these components to ensure their continue best 'spray'. The ability to hold off on the corrective maintenance and to integrate the use of FFX™ would also assist in decreasing the intervals between preventative maintenance scheduling. The better the burn, the less black smoke, resulting in less carbon and soot that can damage engine and exhaust components. The decrease in temperature of activation for combustion means less wear and tear on components; extending the service life of these components allows for an increase in the service interval, improving productivity, and increasing maintenance hour for other functions. Other savings would include the cost of spare-parts inventory and the downtime of these assets.
- *Economic:* It has been proven that the use of Fuel Factor X<sup>™</sup> offers significant benefits in each of the tested areas; indeed, the science would suggest that it would offer similar value to any fuel-operated device. In assessing the impact of using FFX<sup>™</sup>, the tests confirm the possible net savings available to fleet management companies with regard to fuel economy alone. As noted, these finding are also indicative of the findings of others in the Transportation sector.

The following areas of concern are not included in the financial impact:

- 1. Reduced maintenance costs, including, but not limited to, reducing maintenance hours, injector changes, spare-parts inventory, and improved engine life;
- 2. Reduced life cycle costs (cleaner fuel systems and cleaner engines);
- 3. Improved asset utilization allowing for increased productivity;
- 4. Increased serviceability and availability leads to the elimination of capital equipment costs;
- 5. Possible elimination of the costs associated with using other single-purpose fuel additives currently used:
- 6. Improved cold starting, smoother idling, and elimination of black smoke; and
- 7. Improved environmental citizenship.

The overall economic impact evaluation for the testing company was as follows:

Treatment ratio: 1 gallon (US) treats 10,000 gallons (US) or 37,854 liters of fuel

Consumption	Savings	Savings	Fuel Costs	Savings	Net Costs	Net Savings
(Gal/yr)	(%)	(Gal/yr)	(\$/yr)	(\$/yr)	(\$)	(\$)
8,778,332	12.0	1,053,400	\$22,823.663	\$2,738,840	\$317,616	\$2,421,224

# **Deployment Considerations**

There are a number of packaging and deployment options that will minimize the expense of implementation, and have minimal impact on logistics expense.

Because of the high concentration of  $FFX^{\mathbb{M}}$  and the low treatment ratio (one gallon U.S. to 10,000 gallons of fuel), on-site inventory of the product should remain low, minimizing capital outlay to purchase product in advance. The variety of packaging options also ensures ease of use for the addition directly into the fuel.

The most feasible way for fuel to be treated with  $FFX^{m}$  is to add the product directly to large size fuel storage tanks. It might also be possible to arrange with individual fuel suppliers to treat fuel in the delivery vehicle's tanks. This option will obviously depend on the overall amount of fuel being purchased and the willingness of the supplier to treat the fuel before delivery.

Packaging options are also available to treat quantities as small as twenty (20) gallons at a time. This option can be used with smaller vehicles that do not always refuel at central fueling stations.

### Conclusion

MyDailyChoice's Fuel Factor  $X^{TM}$  has been tested in laboratory and field operations, and is currently in use with a large number of organizations globally. As a result of this ongoing testing, it has been demonstrated that the product offers considerable value. Ongoing use of  $FFX^{TM}$  offers significant benefits for any sized organization, the effects of which can been seen in the areas of operational efficiency, environment protection, decreased costs of maintenance and capital outlay, and overall economic savings through reduced fuel consumption, all of which can directly impact the bottom line.

# MyDailyChoice, Inc. Proprietary Chemistry

The driving component, or primary active ingredient in **Fuel Factor X** $^{\text{m}}$  is an organo-metallic fuel catalyst, which has been evaluated utilizing some of the most stringent testing procedures by reputable and reliable laboratories and government entities.

**SAE Paper 900154** – concluded that the active ingredient included in **FFX**<sup>™</sup> improved fuel octane quality, reduced emissions dramatically, while improving fuel efficiency.

**U.S. Department of Interior Bureau of Mines Paper RI 9438** – determined that the active ingredient utilized in FFX™ reduces emissions significantly.

**Southwest Research Diesel Engine Emission Control Technologies Paper**, Appendix B, subsection B.3.5, describes the active ingredient in **FFX** as a catalyst component that increases cetane and reduces burnout time and temperature requirements in new Diesel Particulate Filters (DPF).

**Southwest Research Paper**, Hydrocarbon Fuel Chemistry provides documentation that the active ingredient in FFX™ reduces compression ignition emissions as much as 20% and improves fuel efficiency as much as 10%.

**NIOSH IC 9642, Department of Health and Human Services Paper**, subsection 2.2.3 indicates that the active ingredient incorporated in **FFX**™ reduces smoke particulate by 25% and reduces burnout time and temperatures in new Diesel Particulate Filters (DPF).

**Canadian Environment Protection Agency Paper**, subsection 5.2.4.1 determined that the active ingredient utilized in FFX<sup>™</sup> reduces Diesel Particulate Filter (DPF) filterable matter by 23% and reduces total particulate matter by 22%.

**California Air Resource Board (CARB)**, 3D Air Quality-Emission Report; appendix b states that the active ingredient contained in FFX<sup>™</sup> reduces burnout time and temperature of new Diesel Particulate Filters (DPF). Tests show reductions of particulates by 20% without the DPF and two-fold reductions with DPF.

**Olsen Laboratories** determined that **FFX**<sup>™</sup> reduced emissions during the EPA Highway Fuel Economy Test (HFET) and Federal Test Procedure (FTP).

There are many more such tests available documenting the performance of the organo-metallic active ingredient which is a vital part of the success of **Fuel Factor X** $^{\text{TM}}$ . For this reason, critical think entities, such as those mentioned in this document, have evaluated this organo-metallic compound many times to insure qualitative and quantitative performance.

Possible Examples of net savings estimates (for reference only)

Example 1:

Treatment: 1 gallon (US) treats 10,000 gallons of fuel MSRP: \$1,300.00/gallon or

\$29,900.00/55 gallons drum

Consumption (gal/yr)	Savings (%) *	Savings (gal/yr)	Fuel Costs (\$/yr) **	Savings (\$/yr)	FFX™ Cost (\$) ***	Net Savings (\$)
1,500,000	8.0%	120,000	\$3,900,000	\$312,000	\$87,900	\$224,100
1,500,000	10.0%	150,000	\$3,900,000	\$390,000	\$87,900	\$302,100
1,500,000	12.0%	180,000	\$3,900,000	\$458,000	\$87,900	\$370,100

**Example:** 

Treatment: 1 gallon (US) treats 10,000 gallons of fuel MSRP: \$1,300.00/gallon or

\$24,900.00/55 gallon drums\*\*\*\*

Consumption (gal/yr)	Savings (%) *	Savings (gal/yr)	Fuel Costs (\$/yr) **	Savings (\$/yr)	FFX™ Cost (\$)  ****	Net Savings (\$)
6,000,000	8.0%	480,000	\$22,800,000	\$1,824,000	\$273,900	\$1,550,100
6,000,000	10.0%	600,000	\$22,800,000	\$2,280,000	\$273,900	\$2,006,100
6,000,000	12.0%	720,000	\$22,800,000	\$2,736,000	\$273,900	\$2,462,100

<sup>\*</sup>Potential Savings

\*\*\*\*Multiple drum purchase required to secure this price

Examples reflect only savings generated through reduced fuel consumption and do NOT include any additional savings that can be realized through reduced maintenance, reduced spare parts inventory, reduced engine downtime, overall operational efficiency, and increased equipment life cycle. These savings will be in addition to any of the above amounts.

<sup>\*\*</sup>Projection based on \$3.80 per gallon

<sup>\*\*\*</sup>Based on 55-gallon pricing

### **Exhibit A - Product Information**

Fuel Factor  $X^{\text{TM}}$  is a unique blend of oil soluble organo-metallics that result in better overall performance of your combustion engine. When added to gasoline or diesel fuel, Fuel Factor  $X^{\text{TM}}$  results in increases in MPG and available horsepower, reductions in carbon build-up and carbon related maintenance problems, and reductions in harmful emissions and pollutants sent into the environment through the use of fossil fuels. The purpose of this report is to provide a detailed explanation about how Fuel Factor  $X^{\text{TM}}$  accomplishes these results.

Fuel Factor  $X^{\text{m}}$  contains an advanced burn-rate modifier and combustion surface modifier catalyst, which, when combined with gasoline or diesel fuel, (1) increases the rate of the combustion reaction and (2) changes the molecular surface structure of the fuel to achieve a more efficient combustion process.

A catalyst is a substance that lowers the amount of energy required to start a reaction and which increases the rate at which the reaction occurs without being used up during the process. The catalyst is utilized over and over again without undergoing permanent degradation. The ingredients in Fuel Factor  $X^{\text{m}}$  are used over and over again. When this occurs, the overall combustion time is altered, which makes the small treatment application of Fuel Factor  $X^{\text{m}}$  possible.

The active ingredient in Fuel Factor  $X^{\text{TM}}$  prevents soot particles from adhering to equipment and metal surfaces. The product deactivates the sites where undesirable chemistry occurs. Soot particles are composed of an inner core and an outer shell, as seen using high-powers transition electron microscopes (TEM). The inner core of soot particles is made up of small carbon particulates and the outer shell is formed by carbon crystallites that have a graphite structure, located parallel to the periphery of the inner core. Once the outer shell is formed, combustion of the soot particle is almost impossible. In order to reduce soot formation in diesel engines, mechanisms that oxidize the inner core of soot, before completely formed, are required. The active ingredients in Fuel Factor  $X^{\text{TM}}$  are effective in facilitating this process.

Fuel Factor  $X^{™}$  also reduces the fuel droplet size and thus increases the surface area where combustion occurs. This reduction in fuel droplet size allows for the increase in the frequency of fuel oxygen collisions, ultimately increasing the concentration of reactants, and thereby increasing the rate of the reaction. Fuel Factor  $X^{™}$  initiates the fuel combustion process at a temperature 400 degrees Fahrenheit lower than the normal ignition point. This reaction produces a combustion and fuel-burn efficiency that more closely resembles the ideal OTTO Cycle for gasoline engines and more efficient fuel burn in diesel engines.

The more efficient combustion process resulting from Fuel Factor  $X^{\mathbb{M}}$  eliminates the formation of soot particles in diesel engines by causing combustion of the hydrocarbons before the coagulation of condensates can occur.

Combustion surface modification is an important component of **Fuel Factor X** $^{\text{TM}}$ . Larger particle surface areas result in a more complete burn of the available fuel and reduced particle mass build-up. Corrosive and abrasive engine deposits never form, or if present, are gradually eliminated through ongoing and improved fuel combustion. By burning and eliminating soot particle build-up on equipment surfaces, harmful emissions are reduced significantly.

Fuel Factor  $X^{\text{TM}}$  can also prevent the buildup of carbon deposits on the gas side of turbochargers. As a result, the rated efficiency of the turbocharger can be maintained and water washing can be significantly reduced.

# Exhibit A - Product Information, Continued

The additional components of **Fuel Factor X**<sup>TM</sup> include detergents for both gasoline and diesel engines, lubricants to treat pumps and injectors, a corrosion inhibitor to keep metal parts of the fuel system like new, a demulsifier to reduce and eliminate condensation in the fuel system, stability agents to prolong the life of stored fuel, and polymerization retardants to reduce solid formation. Additional benefits of using **Fuel Factor X**<sup>TM</sup> include reduced cold and acid corrosion, reduced high temperature corrosion and more.

The highly concentrated blend of ingredients in **Fuel Factor X**<sup>TM</sup> (1/4 ounce treats up to 20 gallons of fuel) eliminates the need for multiple products that are intended to treat just one symptom. Regular use of **Fuel Factor X**<sup>TM</sup> will allow for optimum results in engine performance when combined with regular and scheduled maintenance of any combustion engine.

# MATERIAL SAFETY DATA SHEET MYDAILYCHOICE, INC

12382 SOUTH GATEWAY PARK PLACE, SUITE B800 DRAPER, UT 84020

SECTION 1

Identity (as used on label): Fuel Factor X

Chemical Names and Synonyms Fuel Inhibitor & Burn Rate Modifier/Catalyst

Chemical Family:

Formula:

Date Prepared:

Not Applicable

Complex Mixture

November 20, 2009

INFORMATION: 1-801-386-5007

EMERGENCY RESPONSE: 1-800-424-9300

HAZARDOUS MATERIALS INDENTIFICATION SYSTEM (HMIS)
HEALTH: 2
FLAMMABILITY: 2
REACTIVITY: 0
SPECIAL NOTICE: -

SECTION II – HAZARDOUS COMPONENTS CONCENTRATIONS

Propriety Oil Compound
N.A. Trade Secret
Proprietary Compound
N.A. Trade Secret
Proprietary Compound II
N.A. Trade Secret
Proprietary Distillate
N.A. Trade Secret
N.A. Trade Secret
Proprietary Solvent
N.A. Trade Secret

SECTION III – PHYSICAL/CHEMICAL CHARACTERISTICS

Density (LB/gal): 6.88
Solubility in Water Slight

Appearance and Odor: Amber to Orange Liquid, Organic, Solvent odor

SECTION IV- FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used): 164° F (P.M.C.C.)

Extinguishing Media: CO<sub>2</sub> Foam, Dry Chemical or Halon

Special Fire Fighting Procedure: Wear self-contained breathing apparatus. Do not extinguish

with water.

Unusual Fire and Explosion Hazards: None

SECTION V - REACTIVITY DATA

Stability: Stable
Conditions to Avoid: Open Flame

Incompatibility (Materials to Avoid)
Strong oxidizing agents

Hazardous Decomposition Products:

Irritating and/or toxic fumes including CO, CO<sub>2</sub>, N and S Compounds may be released.

Hazardous Polymerization:

Condition to Avoid:

None

Inhalation- can cause irritation, dizziness, nausea, fatigue, headache, and unconsciousness or asphyxiation.

Ingestion- can cause gastrointestinal irritation, nausea, vomiting and diarrhea.

## Exhibit B - MSDS, Continued

### IDENTITY: FUEL FACTOR X

<u>SECTION VI – HEALTH HAZARD DATA</u> THRESHOLD LIMIT VALUE: Not determined for product, see Section II

Route (s) of Entry:

Inhalation? Yes Skin? Yes Ingestion?

### TOXICITY (ACUTE & CHRONIC)

This proprietary amine compound is a mild eye irritant. The acute oral LD50 (rat) is .612 gm/kg. The acute dermal LD50 (rat) is greater than .251 gm/kg. The acute inhalation LC50 is greater than 1 mg/L for one hour exposure (rat).

CARCINOGENICITY: NPT-NO IARC-NO OSHA-NO

Napthenic Oil may cause skin and eye irritation.

NPT-NO IARC-NO OSHA-NO CARCINOGENICITY:

Hexahydro – 1, 3, 5 – triethyl-s-triazine has an acute oral LD50 (rats) of 280 mg/kg. The acute dermal LD50 (rabbits)

is 400 ma/kg.

Acute hepatotoxicity studies have shown severe toxic focal necrosis of the liver in rats. There were no teratogenic

effects in a developmental toxicity study with rats.

NTP-NO IARC-NO OSHA-NO CARCINOGENICITY

### **HEALTH HAZARDS:**

Eyes – can cause irritation, redness, blurred vision. Skin – prolonged contact can cause irritation, dermatitis.

### EMERGENCY AND FIRST AID:

Skin – wash with soap and water

Eyes – flush with copious amounts of water, get medical attention

Inhalation – remove to fresh air. If breathing is impaired get medical attention

Ingestion – do not induce vomiting. Keep warm, get medical attention

### SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE

Steps to be taken in case material is released and spilled:

Clean spill with absorbent material

Eliminate ignition sources

Do not store greasy materials in enclosed containers or for long periods of time.

Waste Disposal Method:

Dispose of waste in a chemical landfill as approved by current, local, state and federal laws and regulations Precautions to be taken in handling and storing:

Protect from physical damage. Store in cool, dry ventilated area away from acids, alkalis, and open flames

Other Precautions:

None

### SECTION VII - CONTROL MEASURES

Respiratory Protection:

Úse NIOSH approved organic respirator if TWA/TLV limits are exceeded

Ventilation:

Use to maintain levels below TWA limits Local Exhaust -

Mechanical -Use non-sparking equipment

Special -None Other-None

Protective Gloves -Chemical resistant gloves Wear safety glasses or goggles Eye Protection -

Other Protective Equipment or Practices:

None

INFORMATION ON THIS FORM IS FURNISHED SOLELY FOR THE PURPOSE OF COMPLIANCE WITH OSHA'S HAZARD COMMUNICATIONS STANDARD, 29 CFR 1910.1200 AND SHALL NOT BE USED FOR ANY OTHER PURPOSE. (SIMILAR TO OSHA FORM 174)

# Exhibit C - Frequently Asked Questions

### Q. Will using the Fuel Factor X<sup>™</sup> void the engine manufacturer's warranty?

**A.** No, Engine manufactures cannot discriminate against the use of a fuel additive. Under the terms of the Magnuson-Moss Warranty act, engine manufacturers must take the position that the use of a fuel additive does NOT void the engine warranty unless it can be proven that the specific additive was the cause of the failure. Manufactures may assert that the use of certain additives may prove useful.

### 0. How does Fuel Factor X™ work?

**A.** Fuel Factor X<sup>™</sup> contains and oil soluble, organo-metallic compound which functions as a 'burn rate modifier' and a 'catalyst' to lower the ignition point of fuel in the combustion chamber. It reduces the temperature of the burn from 1200\*F to 800\*F which increases the length of the time of the fuel burn. This results in a more complete burn of the available BTU's of the fuel. The product also causes a reduction in the fuel droplet size that is injected into the combustion chamber, thus increasing the surface area available to be burned. This results in a more complete fuel burn, which adds horse power, increases mileage, reduces emissions and cleans the engine.

### Q. What makes Fuel Factor X™ different from all the other additives on the market?

**A.** Fuel Factor X<sup>™</sup> is a proven fuel treatment, used in the mining industry for the last 11 years. It is very concentrated; one gallon will treat 10,000 gallons of fuel. Not only does it have a combustion catalyst that will help increase fuel economy, Fuel Factor X<sup>™</sup> also has detergents, to remove harmful deposits from fuel pumps and injectors, lubricants to provide lubrication to pistons, fuel pumps, injectors and reduces friction, fuel stabilizers to prolong the life of stored fuel, polymerization retardant and dispersants to reduce sludge in fuel, rust and corrosion inhibitors to prevent fuel system corrosion and demulsifiers to help reduce water that forms in fuel.

### Q. Can I use lower grades of fuel when using Fuel Factor X™?

**A.** The Fuel Factor X<sup>™</sup> formula allows you to use the lowest octane fuel without causing pings or lower engine performance.

### Q. What happens if I put more Fuel Factor X™ in my tank than is recommended?

**A.** Over treating will not cause any negative effects on your engine. However, you will not get better results by using more of the formula. The recommended treatment rate has proven to provide the best results.

### Q. Do I need to add the Fuel Factor X<sup>™</sup> on an empty tank?

**A.** Fuel Factor X<sup>™</sup> is made to disperse quickly into your complete fuel tank; it does not matter if you add the additive on an empty tank or a full tank. However, it makes more sense to add the additive before you begin pumping your fuel.

# Q. When I pour the additive into my tank, there seems to be some that sits on the metal flap of my gas tank inlet, what happens to that product.

**A.** The additive will only remain on the top of the inlet flap for a few seconds before seeping beyond the flap and down into the fuel tank. It is recommended that you add **Fuel Factor X**<sup>TM</sup> before you begin to pump the fuel which helps disperse the additive throughout the fuel tank.

# Exhibit C - Frequently Asked Questions, Continued

### Q. What does the EPA registration mean?

**A.** In order to get an EPA registration, a product must pass a three phase tier test. The purpose is to ensure the quality of the additive being used in combustion engines. It does not mean that the EPA endorses the product.

### Q. Will using your product damage my engine?

**A.** Fuel Factor X<sup>™</sup> has been specifically tested to ensure complete compliance with all standards and performance criteria. The product will not damage any engine.

### Q. Is Fuel Factor X<sup>™</sup> classified as a hazardous material?

**A.** Fuel Factor  $X^{\text{TM}}$  is considered a non-hazardous material and can be shipped without specific hazardous warnings. The product MSDS (material safety data sheet) is available upon request. Medical treatment is necessary if product should be taken internally. Keep out of the reach of children.

### Q. Can I use the instrument panel in my vehicle that shows 'miles to empty' and MPG as a true measurement?

**A.** Most computers in today's cars and trucks show an average of savings and can be calculated in a number of different ways. It is advised, before using **Fuel Factor X**<sup>™</sup>, to get a true MPG base line, by dividing the number of miles traveled by the gallons of fuel used. Then, once the additive is used, revaluate the savings by the same method. If you pull a boat or trailer you may have to remove the positive battery connection to reset the computer to get an accurate reading on your instrument panel.

### O. What is the difference between Flash Point and Combustion Point?

**A.** The flash point of any volatile liquid is expressed by the lowest temperature at which that liquid can vaporize with the addition of an oxidizer (air) into an ignitable mixture with the assistance of an outside ignition source. Now, this does not mean that the mixture will continue to burn once the ignition source is removed; it only means that it will ignite with an outside ignition source. Continued burning of the volatile liquid is referred to as the "Fire Point."

The combustion or ignition point of a volatile liquid is significantly different. That is the point in which fuel is injected into a combustion chamber, at some point above autoigntion (around 500 degrees K.), where in it mixes completely with an oxidizer (air) and ignites. This takes place some where around 800 to 900 degrees K. This is only an estimate in temperature since temperature is affected by so many other variables, i.e., fuel type, air inlet temperature, load, engine design, etc. Again, this is only the combustion or ignition point, since combustion temperatures vastly exceed combustion or ignition point temperatures due to thermal heat expansion.