

### **GRAPHENE BOOSTER®**

ENGINE OIL ADDITIVE FUEL CONSUMPTION REDUCER

# PRODUCT OVERVIEW





# eco'PRISME is launching a new engine additive capable of reducing fuel consumption by 18%:

#### **GRAPHENE BOOSTER®**

While fuel prices are reaching record highs, a young company has developed an engine additive capable of reducing fuel consumption by up to 18%. The additive is based on Graphene technology, one of the most promising materials in the development of new technologies, which in 2010 earned the Nobel Prize for its discoverers.

After several years of research, the ECO'PRISME company is launching a brand new engine additive that allows considerable fuel savings. Indeed, the addition of 100ml of this additive in the engine oil of a standard vehicle can reduce fuel consumption by up to 18%. A test carried out on a test bench by an independent laboratory as well as tests on vehicles prove the effectiveness of this amazing additive.

Graphene: the material of the future

"We are very happy to launch this new product, especially in this period when fuel prices are soaring. We have been working on this Graphene-based additive for several years. Graphene is a nanomaterial discovered fifteen years ago, in the exceptional physical properties, which has opened up a whole new field of research in physics and chemistry. From flexible screens to the reduction of microprocessors, it offers countless possibilities for innovation. It is the extraordinary thermodynamic properties of this material that we use in our additive. Graphene unfortunately does not exist in its natural state and its production is very expensive. Fortunately, new, more economical manufacturing processes have recently appeared on the market allowing the democratization of this miracle material. You will hear a lot about Graphene in the years to come " predicts Eric BRUNET, the head of the Research and Development laboratory at the origin of the project.

#### Multiple benefits

Graphene Booster® is marketed in a recyclable aluminum bottle of 100ml and comes in the form of a black viscous liquid. The product should be incorporated directly into the oil pan. A dose of 100ml is sufficient for a standard vehicle. Graphene Booster is compatible with all types of combustion engines (car, motorcycle, truck, boat...) and all types of fuels. Its addition is absolutely safe for engines. By coating the internal walls of the engine, Graphene Booster improves the thermodynamic performance of the oil and improves engine performance. Results: better energy efficiency, better performance, less polluting emissions. The product remains effective for 2 oil changes. The cost of treatment is quickly amortized by the savings made.



#### About ECO'PRISM.

ECO'PRISME is a company with a mission for the environment, based in Auzat-la-Combelle in Puy-de-Dôme (63). ECO'PRISME sheds new light on Chemistry by reconciling performance and respect for the environment. Its formulations come from the latest technological innovations and are designed to minimize their environmental impact. ECO'PRISME creates reflection and changes your view of Chemistry.

Head office: ECO'PRISME- ZA du Puy Bayard- 3, chemin des Chambettes -63570 AUZAT LA COMBELLE



# GRAPHENE BOOSTER®

# ENGINE OIL ADDITIVE FUEL CONSUMPTION REDUCER



#### **PRODUCT DESCRIPTION**

**GRAPHENE BOOSTER®** is a new generation lubrication enhancer formulated with graphene. Graphene, a nanomaterial whose properties were discovered some fifteen years ago, offers many prospects for innovation in multiple industrial sectors.

Safe and compatible with all types of engines, GRAPHENE BOOSTER® improves their performance by reducing the friction of moving parts and optimizing the thermodynamic qualities of engines. It boosts mechanical efficiency and also allows a considerable reduction in fuel consumption. (Between 5 and 18% fuel savings depending on the driving mode according to a study carried out by an independent control laboratory AGRISCAN MECA CONSEIL).

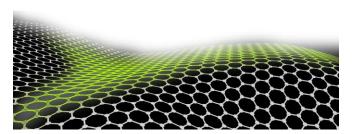
In the formulation of **GRAPHENE BOOSTER®**, graphene is associated with a very high performance lubricant, Mid SAPS, specially developed to meet manufacturers' requirements for low-emission engines.

**GRAPHENE BOOSTER®** is compatible with aftertreatment equipment (3-way catalysts, oxidation catalysts, particulate filters) of gasoline and diesel passenger vehicles, light commercial vehicles, trucks, tractors, buses, boats, gas engines, equipment industry, compressors, generators, etc.



#### **BENEFITS**

- Reduction in fuel consumption: savings of up to 18%. \*
- Power gain between 3 and 5%. \*
- Noise reduction.
- Corrosion control.
- Improves operation at extreme temperatures (including cold starts).
- Economical: The treatment only needs to be renewed every 2 oil changes. (60,000 km).
- The cost of the treatment amortized very quickly (between 4 and 5 fill-ups).
- \* according to the tests of the PV AGRISCAN MECA CONSEIL and the tests carried out by the L.E.D.Réduction



3D illustration of Graphene molecules.

#### **PACKAGING**

100 ml aluminum bottle totally recyclable.



#### **FEATURES**

| Features                 | Unit       | Average values |
|--------------------------|------------|----------------|
| Density at 15°C          | kg/m3      | 850            |
| Viscosity at 40°C        | cSt        | 63.5           |
| Viscosity at 100°C       | cSt        | 10.5           |
| Viscosity Index          | /          | 150            |
| CCS viscosity at -35°C   | /          | < 6200         |
| Viscosity HT/HS at 150°C | CENTIPOISE | < 2.9          |
| Pour point (ASTM D97)    | °C         | <-35           |
| Flash point (ASTM D92)   | °C         | > 240          |
| Sulfated ash content     | % mass     | 0.7998         |
| Sulfur content           | % mass     | 0.182          |
| Phosphorus content       | % mass     | 0.08           |
| TBN (ASTM D2896)         | mg KOH/g   | 7.998          |

Graphene, a "natural" material derived from graphite, is an innovative carbon material with amazing properties. Often described as a "miracle material", graphene is the lightest, thinnest, strongest, most durable, waterproof and best thermal conductor material known. Graphene also has the highest lubricity or the lowest coefficient of friction of any known material.

To learn more about graphene:

https://www.calameo.com/read/007159834276d658 94449

Due to the specific properties of graphene, our **GRAPHENE BOOSTER**® lubrication modifier not only treats the oil, it modifies its molecular structure to increase its performance.

#### **INSTRUCTIONS FOR USE**

 Cold engine, check your oil level. It should not be too high to allow the addition of the dose of GRAPHENE BOOSTER®





- Shake the bottle of GRAPHENE BOOSTER® vigorously before use.
- Incorporate the correct dose into the engine.
   The efficiency will only be fully effective after 4 hours minimum of operation of the engine at normal speed, without sudden acceleration

**GRAPHENE BOOSTER**® should deposit on all internal metal surfaces of the engine.

#### CONSUMPTION

<u>Dosage:</u> 100 ml dose suitable for an engine with an oil sump of 4 to 7 liters capacity.

Adapt the quantities in proportion to the volume of oil in your vehicle.

#### For example:

Motorcycle with oil volume of 2 L: ½ dose.

Truck with oil volume of 20 L: 3 doses...

#### **STORAGE**

- Keep container closed until use.
- Keep away from direct sunlight and heat.
- · Remember to recycle empty packaging.

#### **HANDLING & SAFETY**

• Consult the Safety Data Sheet before use.

#### KEEP OUT OF REACH OF CHILDREN

Product developed and manufactured in France





**Company with Mission for the Environment** 

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## GRAPHENE BOOSTER®

### ENGINE OIL ADDITIVE FUEL CONSUMPTION REDUCER



#### PRODUCT DESCRIPTION

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Safe and compatible with all types of engines, **GRAPHENE BOOSTER**® improves their performance by reducing the friction of moving parts and optimizing the thermodynamic qualities of engines.

**GRAPHENE BOOSTER**® prevents the formation of deposits and also reduces polluting emissions.

**GRAPHENE BOOSTER**® boosts the mechanical efficiency of engines offering a power gain of around 3 to 5%.

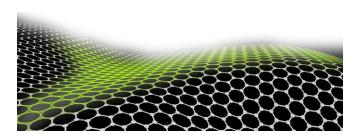
**GRAPHENE BOOSTER®** allows a considerable reduction in fuel consumption. (About between 5 and 8% fuel savings for a commercial or cruise ship, according to a study carried out by an independent control laboratory AGRISCAN MECA CONSEIL).



Global shipping now accounts for around 3% of greenhouse gas emissions. Thanks to **GRAPHENE BOOSTER®** by reducing your fuel consumption and reducing the release of polluting fumes, you achieve both an economic and ecological gain.

#### **BENEFITS**

- Average reduction in fuel consumption of up to 8%\*.
- Reduction in pollution and greenhouse gas emissions.
- Power gain of between 3 and 5%.
- Noise reduction.
- Corrosion control.
- Long-lasting treatment.
- \* according to the tests of the PV AGRISCAN MECA CONSEIL and the tests carried out by the laboratory L.E.D.



3D illustration of Graphene molecules

#### **FEATURES**

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Due to the specific properties of graphene, our **GRAPHENE BOOSTER**® lubrication modifier not only treats the oil, it modifies its molecular structure to increase its performance.

#### **INSTRUCTIONS FOR USE**

- Mix the GRAPHENE BOOSTER® before use, with a mixer, at low speed, for 3 minutes in order to guarantee a good homogeneity of the product.
- It is ideal to add the correct amount of GRAPHENE BOOSTER® to the new oil during an oil change.
- Incorporate into the engine taking into account the total volume of oil required.
- Efficiency will only be fully effective after several hours of engine operation at normal speed.

**GRAPHENE BOOSTER®** should deposit on all internal metal surfaces of the engine.

#### **PACKAGING**

27-liter recyclable metal container. 200-liter recyclable metal drum.

#### CONSUMPTION

<u>Dosage:</u> add GRAPHENE BOOSTER® at a rate of 1.8% of the quantity of engine oil.

For example, for an oil quantity of 3,000 liters, add 54 liters of GRAPHENE BOOSTER®

A 27-liter container can treat 1,500 liters of oil.

A 200-liter drum can handle 11,100 liters of oil.



#### **STORAGE**

- Keep container closed until use.
- Keep away from direct sunlight and heat.
- Remember to recycle empty packaging.

#### PRÉCAUTIONS D'UTILISATION

Consult the Safety Data Sheet before use

#### KEEP OUT OF REACH OF CHILDREN

Product developed and manufactured in France





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Graphene, a nanomaterial whose properties were discovered fifteen years ago, offers many prospects for innovation in multiple industrial sectors.

Safe and compatible with all engine types,

**GRAPHENE BOOSTER®** improves their performance by reducing the friction of parts and optimizing the thermodynamic qualities of engines.

**GRAPHENE BOOSTER** ® boosts mechanical efficiency and also allows a considerable reduction in fuel consumption.

GRAPHENE BOOSTER®
LOWERS FUEL
CONSUMPTION
FROM 5 TO 18%\*

\*according to tests carried out by L.E.D and AGRISCAN MECA CONSEIL laboratories



**REDUCES FUEL CONSUMPTION** 



**IMPROVES ENGINE PERFORMANCE** 



**COMPATIBLE WITH ALL TYPES OF ENGINES** 



**REDUCES POLLUTION** 



**LONG-TERM TREATMENT** 



#### GRAPHENE BOOSTER® REDUCES FUEL CONSUMPTION BY 5 TO 18%.

According to tests carried out by L.E.D and AGRISCAN MECA CONSEIL laboratories, **GRAPHENE BOOSTER®** achieves fuel savings of 5 to 18%.

As examples:

A passenger vehicle consuming 8 litres/100 km of fuel and traveling 20,000 km per year will save around **14%** fuel, or **220 liters** of fuel per year.

A heavy vehicle (bus, truck) consuming 40 litres/100 km and traveling 45,000 km per year will save around **10%** fuel, or **1,800 liters** of fuel per year.



#### GRAPHENE BOOSTER® IS COMPATIBLE WITH ALL TYPES OF ENGINES.

**GRAPHENE BOOSTER** <sup>®</sup> is compatible with aftertreatment equipment (3-way catalysts, oxidation catalysts, particulate filters) of gasoline and diesel passenger cars, light commercial vehicles, trucks, tractors, buses, boats, gas engines, industrial equipment, compressors, generators...



#### GRAPHENE BOOSTER® ALLOWS A POWER GAIN OF 3 TO 5%.

**GRAPHENE BOOSTER®**, thanks to the extreme lubrication provided by the Graphene molecules, helps to optimize engine performance by reducing friction, thus allowing the engine to gain power.



#### GRAPHENE BOOSTER® REDUCES POLLUTION.

**GRAPHENE BOOSTER** • prevents the formation of deposits and reduces combustion. You will thus find optimal engine performance while limiting your fuel consumption.



### GRAPHENE BOOSTER® IMPROVES THE OPERATION OF ENGINES AT EXTREME TEMPERATURES.

**GRAPHENE BOOSTER®** radically reduces engine wear during cold starts (500 to 1000 rpm), reduces piston ring vibrations and increases the longevity of mechanical parts and compression.



#### GRAPHENE BOOSTER® IS EFFECTIVE FOR 2 OIL CHANGES.

**GRAPHENE BOOSTER®** remains effective for two oil changes. The graphene will in fact be deposited on the internal walls of the engine and, thanks to its extraordinary non-stick power, allow its optimal lubrication.

A treatment with **GRAPHENE BOOSTER**® thus remains effective for 60,000 km or 2 years on a passenger vehicle.



#### Société à Mission pour l'Environnement

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### **GRAPHENE**

#### THE MATERIAL OF THE FUTURE

Miracle material, revolutionary molecule, superlatives rain down on graphene. Better conductor than copper, two hundred times more resistant than steel while being six times lighter, more flexible and waterproof. On paper, graphene is first in all categories. It is difficult to envisage one day doing without metal or plastic, and yet this new material could soon impose itself in all areas.

#### The history of graphene

Graphene is a two-dimensional crystal of carbon atoms evenly distributed in a hexagonal lattice in the shape of a honeycomb. In nature, the stacking of layers of graphene forms graphite, which is commonly found in our pencil leads. Rolled up on itself, it forms carbon nanotubes.

Graphene was discovered in 2004 by André Geim and Konstantin Novoselov, professors at the University of Manchester, and awarded the Nobel Prize in 2010. Without really believing it, the researchers used the adhesive tape from a roll of tape to glue scraps of graphite to it. Then they folded this strip whose adhesive side was covered with graphite. By unfolding it, they reduced its thickness. And so on... In the end, there was only a layer of graphite left. André Geim had made the discovery that would earn him the Nobel Prize: the finest carbon crystal, only one atom thick.

#### https://fr.wikipedia.org/wiki/Graph%C3%A8ne

Since 2004, it has aroused extraordinary enthusiasm. It gives rise to varied research, from the most fundamental to the most applied.

Today, research on graphene has very significant resources, especially in Europe. Indeed, the European Union has invested 1 billion euros spread over 10 years. The objective is to develop manufacturing techniques on an industrial scale. But also to exploit the exceptional properties of this material in all possible fields.

https://cordis.europa.eu/article/id/124617-europes-investment-in-graphene/fr https://graphene-flagship.eu/

Flexible, lightweight, ultra-resistant, transparent, excellent thermal and electrical conductor, impermeable to many gases... Graphene has physico-chemical qualities that open up many avenues for it. Particularly in the fields of electronics, energy, health and materials science.

https://www.graphene.manchester.ac.uk/learn/applications/

### These unique properties allow graphene to be used in many applications, but which ones exactly?

#### Graphene is revolutionizing coating.

Graphene has shown great application potential in most industries, including the paint and coating industry.

https://blog.iglcoatings.com/the-science-of-graphene-based-protective-coating/

https://www.paint.org/ coatingstech-magazine/articles/graphene-coatings-exciting-properties-and- wideranging-potential/

#### Graphene and the oil industry.

The exceptional properties of graphene make it possible to obtain super-lubricating products that eliminate mechanical wear.

https://www.ami-universite-telaviv.com/index.php/2013-05-26-08-41-51/recherche/sciences/physique/920- un-super-lubrifiant-supprimant-l-usure- m%C3%A9canique-d%C3%A9velopp%C3%A9-%C3%A0-university%C3%A9-of-tel-aviv

https://www.sciencedirect.com/science/article/pii/S0920410518303218

#### Graphene and electronics.

The combination of its exceptional electronic properties, its flexibility and its transparency now opens the way to the era of flexible electronics for the screens of mobile phones and tablets as well as for the textile sector.

https://lejournal.cnrs.fr/articles/le-graphene-superstar-episode-1

#### Graphene at the service of energy.

Studies have shown that graphene absorbs only 2.3% of the light received. This makes it a very transparent material. By combining this property with its flexibility and its excellent conductivity, applications have been imagined in the field of photovoltaic panels. Graphene porous structures are used in batteries, chargers, fuel cells.

https://lejournal.cnrs.fr/articles/le-graphene-superstar-episode-2

https://www.techniques-ingenieur.fr/actualite/ articles/le-graphene-materiau-du-xxieme-siecle-31936/

https://www.boursorama.com/patrimoine/actualites/ technologie-les-panneaux-solaires-fonctionnent-aussien-cas-de-pluie-0976856ffd5803eb0cc4c6fb1e0f382b

#### Graphene to the rescue of health.

In the field of health, it is the surface and conductivity properties of graphene that are used. By combining its large contact surface and its electrical conductivity, ultra-sensitive gas detectors at room temperature will be developed. Currently, the sensitive detection of pollution is a major challenge for the health of cities and countryside.

https://lejournal.cnrs.fr/articles/le-graphene-superstar-episode-3

https://today.uic.edu/first-use-of-graphene-to-detect-cancer-cells/

#### Graphene and the materials of the future.

The exceptional rigidity of graphene associated in composite materials, lets imagine many applications in the field of materials. For example, as a replacement for metallic materials for the construction of lighter aircraft, therefore less expensive and less energy-intensive.

https://lejournal.cnrs.fr/articles/le-graphene-superstar-episode-4

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#### **TEST REPORT**

### **RAPPORT D'ESSAIS N° 4011/EB**

**TEST APPLICANT:** 

BATICOM/PRISM

Date of the test request: 18/12/2019

TESTS CARRIED OUT ON: GRAPHENE BOOSTER

#### **NATURE OF TESTS:**

Power/economy study on tractor bench. Study of real conditions of use of an SUV vehicle.



STUDY N° 4011 - EB

On 05/10/22

#### 1. SAMPLES RECEIVED:

GRAPHENE BOOSTER - LOT NO. 190215

#### 2. NATURE OF MATERIALS USED

Power bench and consumption control Agriscan test bench from ROTRONICS

Vehicles tested: On the test bench:

Tractor

Brand: Deutz Fahr Type: 115 MK3 Model: AGROTRON

Type of oil: MULTIFUNCTIONAL OIL MOBIL AGRI SUPER 15W40

Engine oil sump capacity: 18l Commissioning of the Vehicle: 2007



In real conditions:

VL

Brand: NISSAN

Type: MURANO 2.5 DCI Vehicle empty weight: 1950kg Power:

190CV

Engine oil sump capacity: 6.6l + 0.5l oil filter Oil type:

CASTROL GTX, C4 5W30

Commissioning of the Vehicle: 09/2020

Km at the start of the test: 62,505 km

End of the test: 115,630 km, i.e. a distance covered of 53,125 km



STUDY N° 4011 - EB

On 05/10/22



#### 3. PREPARATION OF VEHICLES

#### **TRACTOR**

The technician carried out the engine oil change, then carried out an internal cleaning of the engine. Then the oil sump was filled with the oil recommended by the manufacturer (OIL 15W40).

After the reference test on the bench, the technician repeated the operation by adding 2 doses of GRAPHENE BOOSTER (2x100ml).

#### NAV

The owner incorporated 1 dose of GRAPHENE BOOSTER (100ml) in the vehicle while it had covered 62,585 km

At 93,040 km, the owner had the oil changed in a garage in AUZAT LA COMBELLE. To date the vehicle has more than 110,000 km.

#### 4. TESTING DETAILS

Bench principle.

#### PTO Agricultural Test Bench

AGRISCAN uses precise sensors: 80 measurement points per revolution for the speed sensor and 0.02% error for the force sensor which measures the braking torque. Combined with fully digital data acquisition and brake control, the whole thing constitutes an extremely precise and stable measurement chain: less than 0.1% error!

The operating software plays the role of interface between this accuracy and the user by formatting the results obtained. The operating principle ensures compatibility with all agricultural machinery supply systems, including those with very high sweeping rates. Indeed, by design, this system does not disturb the fuel supply circuit of the engine, which is not the case with conventional systems carrying out a volumetric measurement. Mass measurement also guarantees the reliability of the information; the energy value of the measurement is direct and not the result of a calculation which can sometimes prove to be uncertain. Since the calculation of the specific consumption is also more precise, the analysis and use of the results are more efficient. The absence of moving parts considerably reduces the risk of failure and measurement drift. This measurement is recorded by the software which transcribes the values into curves and superimposes them on the torque curves.

Principle in real conditions.
Control is done via the on-board computer.

STUDY N° 4011 - EB

On 05/10/22

#### 5. TEST CONDITIONS

#### RENCH

The engine is stabilized at a certain number of rpm and the fuel consumption is calculated.

A new power test was carried out a week after the initial test and the power increased by 3.5hp.

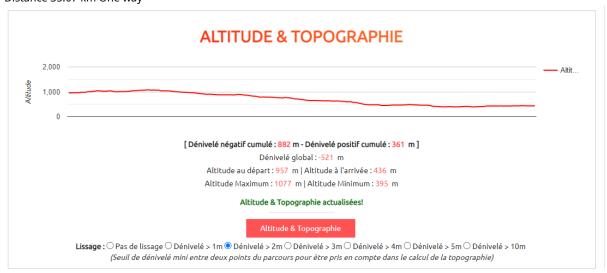
#### LV route study

Weekly route:

Distance 68.81 km One way



Trip 3 to 4 times/week (3.5) Distance 35.07 km One way



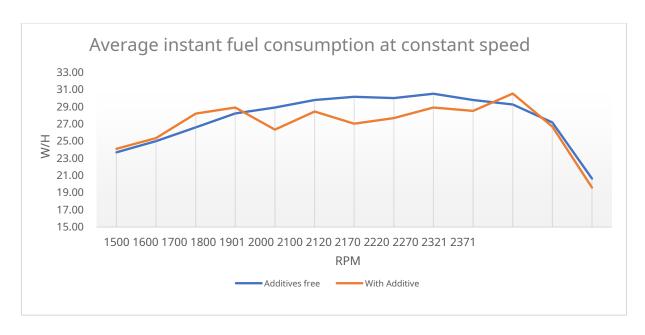
The average over 11 months is 172,621 m of elevation per year, i.e. over 3 years more than 517 km of elevation.

STUDY N° 4011 - EB

#### 6. RESULT

#### **6.1** BENCH

After eliminating the non-representative values, the average fuel consumption varies according to the engine speed, in the test it can reach 10% at 2100rpm.



The maximum power increases on the intermediate tests:

- 30 hp at 1600 rpm (light work): +4.3% time with the same amount of diesel
- 60 hp at 1600 rpm (heavy work, ploughing): +3%
- 60 hp at 1900 rpm (average of a road trip): +4.3%
- 80 hp at 2200 rpm (power take-off work, mower, rotary harrow): +2%.

One week after the bench test, the power of the tractor was rechecked with a gain of 3.5hp

#### **6.2** REAL CONDITIONS

The calculator said:

At the start of the test: (62,505 km) 9.8I/100km

At 63,285 km: 9.1l/100km

At 93,040 km (oil change): 8.1l/km

At 105,312: 8.1I/100km

To date the vehicle has 114,033km: 8.2l/100km



STUDY N° 4011 - EB

On 05/10/22

#### 7. FINDINGS

Bench tests immediately after incorporation of the additive give results ranging from 2 to 10% depending on the diet.

The tests in real conditions give results of the order of 7.1% after 700km, which is close to the results on the bench.

The observed saving is 17.35% after several thousand km.

It would seem that the effect is diminishing, at the last check the gain had increased to 16.33%.

#### 8. CONCLUSIONS

The GRAPHENE BOOSTER is effective on both a tractor and an SUV.

The important initial consumption of the MURANO is due to the course of this one, indeed the cumulated unevenness is approximately 750km.

The test in real conditions showed that the gain in fuel consumption is not instantaneous.

This comes from the dispersion time of the graphene necessary on all the moving engine parts.

It can be noted that this vehicle has been drained without this changing the effectiveness of the product. We begin to notice a slight drop in efficiency after 50,000 km

Clermont-Ferrand, 05/10/22

12

The test technician

The Laboratory Manager

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### **GRAPHENE BOOSTER**



STUDY N° 4025 - EB

On 05/10/22

#### 1. COMPOSITION:

The GRAPHENE BOOSTER product is composed of Graphene and standardized 0W20 synthetic oil, used in high-end vehicles.

#### 2. WHAT IS GRAPHENE?

It is a two-dimensional material, composed of layers of carbon atoms forming six-membered rings. Graphene is the mother of all graphitic forms, including zero-dimensional fullerenes, one-dimensional carbon nanotubes, and three-dimensional graphite

#### 3. WHY GRAPHENE?

Since graphene is a two-dimensional material, it offers unique friction and wear properties not typically seen in conventional materials. Besides its well-established thermal, electrical, optical and mechanical properties, graphene can serve as a solid or colloidal liquid lubricant. Its high chemical inertness, extreme strength and ability to easily shear on its dense and atomically smooth surface are the main attributes favorable to its impressive tribological behavior. Since it is ultra-thin even with multilayers, it can be applied to nanoscale or microscale systems such as micro electromechanical systems (MEMS) and nano electromechanical systems (NEMS) with oscillating contacts,

Second, graphene has been shown to be impermeable to liquids and gases, such as water or oxygen, thus slowing down the corrosive and oxidative processes that generally damage friction surfaces more. Additionally, liquid water has been shown to minimize friction on graphene, thus likely limiting the effect of capillary forces typical of humid environments. Singh et al. [8] demonstrated that the wetting angle is affected by the surface under the graphene layer; however, the effect of the substrate is modified by the number of layers and is negligible for multiple layers of graphene. Moreover,

All the properties mentioned above make Graphene very attractive for demanding tribological applications to achieve low friction and low wear regimes, hence its use in the GRAPHENE BOOSTER.

#### 4. WHAT ARE THE RISKS FOR ENGINES?

No risks. Unlike products containing Teflon for example, Graphene is not a polymer, but pure carbon. It cannot deteriorate. The only way to transform it would be to heat it around 1500°C with gigantic pressure to transform it into diamond (another form of pure carbon).

#### **5. A MATERIAL RECOGNIZED BY THE GREATEST CHEMISTS**

 Influence of tribology on global energy consumption, costs and emissions Authors: Kenneth Holmberg & Ali Erdemir – 2017



STUDY N° 4025 - EB

On 05/10/22

- Chemically Functionalized Reduced Graphene Oxide as a Novel Material for Reduction of Friction and Wear
  - Authors: Harshal P. Mungse and Om P. Khatri 2014
- Development of nanolubricant based on impregnated multilayer graphene for automotive applications: Analysis of tribological properties
- Authors: EDRamón-Raygoza, CIRivera-Solorio, E.Giménez-Torres, D.Maldonado-Cortés, E.Cardenas-Alemánd, Cué-Sampedro - 2016

The list is long, and we must not forget that the Nobel Prize in Physics was awarded on Tuesday, October 5, 2010, to Russian researchers André Geim and Konstantin Novoselov for their work on graphene.

#### 6. CONCLUSIONS

As the tests as well as all the scientific literature prove, the GRAPHENE BOOSTER can in no way damage an engine, but on the contrary bring significant improvements to it and thereby make substantial savings.

Clermont-Ferrand, 08/25/22

oratory





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