

**LUBTECH BORON NITRIDE lowers fuel consumption and helps to maintain the condition of the engine**

LUBTECH BORON NITRIDE dramatically helps to reduce fuel consumption and helps to extend the life of your engine oil by approximately 50%, which significantly reduces costs.

Through the use of LUBTECH BORON NITRIDE you can help protect the environment as it reduces fuel consumption.

LUBTECH BORON NITRIDE minimises the friction between the metal pieces, which consequently causes a decrease of the coefficient of friction. The metal pieces then need less energy to move; as a result of this the fuel consumption sinks. Diverse testing showed that LUBTECH BORON NITRIDE reduced fuel consumption on average of about 25%.

Through the outstanding lubricating qualities of LUBTECH BORON NITRIDE the inside of the engine is better protected and consequently the life-span of your engine is extended.

#### **The additive boron nitride**

In Japan boron nitride has been produced since the eighties, in the nineties the average diameter of a particle was 5µm (micron). Now we can produce particles with a diameter of 0.01µm when required. The advances made in the development of boron nitride meant that it was possible to use boron nitride to produce a lubricant.

Due to its special characteristics boron nitride is highly appropriate as a lubricant. The substance has a high heat-stability, outstanding warmth-transmission, light warmth-extension and good lubrication; it also has good isolation qualities, special chemical stability and resistance to corrosion.

### **Six special qualities of boron nitride**

#### 1) High heat - stability

Can be used in a vacuum till 2000C, and in an inert atmosphere until 2200 degrees without any problems.

#### 2) Outstanding warmth - transmission

boron nitride is a ceramic product which can transmit high volumes of heat similar to steel

#### 3) Low Thermal Expansion

The low thermal expansion and the good heat conductivity are excellent characteristics for a lubricant.

#### 4) Outstanding Lubrication

The crystal layers which overlap one and another move smoothly along and peel off easily. In an oxygenated atmosphere with a temperature of 900C the coefficient of friction  $\mu$  lies under 0.2; in a normal temperature it lies at 0.04. Thus boron nitride lowers the friction resistance within the combustion engine (petrol, diesel, LPG, alcohol a.o.), and this can also reduce the wear and tear of the gear box.

#### 5) Good Insulation Qualities

The substance has excellent insulation qualities. The melting rate and dielectric coefficient are low. Thus the substance can insulate at various temperatures.

#### 6) Excellent chemical stability and resistance to corrosion

Well compatible with organic and non-organic matter, it is highly resistant to corrosion.

### **Instructions for use**

\*) For 4 litre engine oil (which is approximately the equivalent to a single oil change in a passenger car), please use 100ml (one bottle) of LUBTECH BORON NITRIDE. With different amounts of engine oil, please reduce or increase the amount of LUBTECH BORON NITRIDE accordingly. (Lorries use between 5 and 20 litres of engine oil. Please increase amount of LUBTECH BORON NITRIDE accordingly)

\*) Please switch off the engine when LUBTECH BORON NITRIDE is added and let **the engine cool down**.

**Attention!** If the boron nitride is added whilst the engine is running, oil may make contact with the eyes and hands because of the pressure in the engine.

To guarantee maximum effect from LUBTECH BORON NITRIDE, the substance has to be **well stirred and shaken**. To stir the liquid you can use for example use a screwdriver. Then open the engine oil cap and pour the LUBTECH BORON NITRIDE in. Please be careful not to leave any residue on the tank, as LUBTECH BORON NITRIDE is only effective when the **whole** contents of the bottle is emptied into the oil tank! The boron nitride particles which are especially important can sometimes form deposits in the container. Should this happen, the LUBTECH BORON NITRIDE canister should be flushed out with engine oil. Please ensure that the deposits are well mixed up with the engine oil, before the substance is filled into the oil tank. (Never fill into the fuel tank!)

\*) After adding the LUBTECH BORON NITRIDE, let the engine run for approx. 10 minutes, so that LUBTECH BORON NITRIDE can disperse itself onto every area of the engine: in order to reap the benefits from LUBTECH BORON NITRIDE.

\*) After 300 to 500 km the full effects from LUBTECH BORON NITRIDE are noticeable.

#### **Tips for the reduction of fuel consumption:**

Fuel consumption also depends on your manner of driving.

Tests have shown that the effects of LUBTECH BORON NITRIDE are especially high with a petrol-saving manner of driving.

1) Through the use of LUBTECH BORON NITRIDE the noise and the vibrations of the engine are reduced, the benefits are increased when you drive in a reasonable speed, when driving be aware of your speed. (Don't Step too much on the accelerator). Don't worry you will soon become accustomed to the new manner of driving.

2) When driving downhill or at a high speed try to step off the accelerator and to use the engine to brake. If you use the engine to brake, you won't use

any additional fuel and therefore save fuel.

3) Drivers who constantly accelerate will obviously not save large amounts of petrol, please try to not continuously accelerate.

4) It is recommended to regularly check the tyre pressure to ensure the best efficiency levels.

5) Air conditioning uses extra fuel it is therefore recommended to use it only when strictly necessary in order to save on fuel costs.

6) Additional weight also means more fuel consumption. Please don't carry more than necessary in your boot.

You will see: fuel consumption will improve! Thus, while driving it is possible to reduce the amount of exhaust fumes this consequently is better for the environment.

#### **Warning notices**

-) **Only employ the product for the intended use.** This product is suited to be used as an addition to engine for the use with petrol and Diesel engines.

The product isn't adequate for the use of two-stroke engines, and gear oil for motorcycles (wet clutch)

**Warning:** Do not fill into the fuel tank!

-) **Avoid contact between the product and skin!** Should LUBTECH BORON NITRIDE reach your skin, wash immediately with a neutral soap. Persons with an inflammation (for example dermatitis) or people with sensitive skin should immediately seek medical assistance. When handling the liquid, it is recommended to wear protective gloves

-) **Please note the recommended quantities,** otherwise problems or damages may occur.

-) The liquid **shouldn't come in contact with your eyes.** If the liquid comes in contact with your eyes, please rinse thoroughly for approx. 15 minutes and consult a specialist.

-) Don't refill the liquid into another container!

-) Don't mix with other liquids!

-) Keep **the product out of the reach of children!**

-) **Don't drink the liquid!** Should the liquid be consumed or make contact with your mouth, spit the liquid out immediately or is to be regurgitated out of the body and immediately consult a doctor.

### **The developer of LUBTECH BORON NITRIDE**

Hiroshi Sato took part in a research project for automobiles from 1983 until 1987, in which he researched the possibility to employ fine ceramics for the production of automobile lubricants. The results were 3 adequate automobile lubricants: 1) PTFE, 2) fluoric carbon, and 3) boron nitride.

Back then he was very convinced that he found a potential effective lubricant for the future. But at that time the particle size was too big to use, and the project was stopped ahead of time. After that, he went independent and in 1989 he established the automobile lubricant producer company S.U.N. and continued researching on those three lubricants. In 2004, 20 years after he began of the research, he chose the additive that was most suitable as a lubricant, boron nitride. With modern technology the particle size was reduced and respectively the molecular size and he then successfully managed to begin with the production of LUBTECH BORON NITRIDE.