

# PURAFINER

## FREQUENTLY ASKED QUESTIONS



### Q. How does Purafiner work?

- A. Purafiner is not a biocide; it does not kill the bug. It is a bio-control unit. It affects the living organism by disrupting its environment and breaking the biomass down into individual plasmolized cells of less than 1 micron in size. These pass through the fuel filter and burn up in the engine.

### Q. What about the fuel returned to the vehicles tank?

- A. The treated cells remain dormant and inactive for long periods. The time frame depends on the environmental conditions, but it is long enough for the cells to be consumed by the engine. The fuel tank is slowly cleaned up in the process.

### Q. How do you know what the effect of the magnetic field really is?

- A. Purifiner Distributors NZ Ltd retained the School of Ocean Sciences in the University of Wales at Anglesey, UK to conduct an experiment to prove the effectiveness of Purafiner. The methodology of the test was devised by The School of Ocean Sciences in conjunction with Lloyds Register of Shipping Type Approval Department of Engineering Services, Reference **TA/40397/67488/94REL**.

### Q. What form did the experiment take?

- A. The experiment was devised to determine the effect on a magnetically protected filter compared with an unprotected one when circulated with microbiologically contaminated fuel.

### Q. What was the result?

- A. The result was that the unprotected filter became an ideal environment for microbiological growth and the filter became blocked. The protected one remained unblocked. The filter life was increased by a factor of 10. The results were so impressive that the University submitted them to the leading journal in the field of biological contamination for publication. The article was accepted and was published in Volume 14(3) 1999 of BIOFOULING.

**Q. Is Purafiner a cost-effective method of control of biological contamination?**

**A.** Yes. The continual use of expensive and toxic biocides and the associated hazards are eliminated.

**Q. Will the magnetic field affect electronic or computerised engine/dispenser components?**

**A.** No. The field is depleted after it moves about 80mm from the unit. In addition, the field is absorbed by adjacent ferrite materials.

**Q. Would a more powerful magnet be more effective?**

**A.** No. The result would be the same but the cost greater.

**Q. Is it true that the Purafiner will save fuel? If it does, how is this achieved?**

**A.** Purafiner makes no claims that a magnetic field has any effect on fuel economy.

**Q. Can Purafiner be used to protect fuel storage tanks?**

**A.** Yes. By periodically circulating the fuel through a Purafiner the microbial matter can be maintained in a controlled, dormant condition.

**Q. Can Purafiner be used with other fluid systems containing microbial contamination?**

**A.** Yes, most definitely.

**Q. Why does Purafiner reduce engine smoke emissions?**

**A.** Quite simply the biological contamination is removed and fuel quality is improved. If the system is contaminated then as it becomes cleaner the combustion process improves, giving cleaner, faster and more complete combustion of the fuel injected into the combustion spaces.

**Q. Why should I fit a Purafiner to my engine or dispensing system?**

- A.** Well, it depends on the circumstances. If your system is biologically fouled the Purafiner will deal with the contamination, clean the system up and keep it clean.  
If your system is not contaminated, then the aim is to keep it that way. You never know when you are likely to receive contaminated fuel.  
Think of it in terms of your computer. Why do you install a virus protection programme?  
·To deal with any existing virus contamination.  
·To protect your files from any virus that gets down loaded from an external source.  
The same principle applies with the installation of Purafiner.  
·To deal with existing contamination.  
·To prevent any introduced bug from making a comfortable home for itself and degrading your engine system.

**Q. Do I need added protection if I have a centrifugal purifier?**

- A.** Yes, you do. The microbiological growth has approximately the same specific gravity as the fuel or oil that it is growing in. This means that the centrifuge, which is designed to remove contaminants that are heavier than the fuel or oil, e.g. dirt and water, will not remove lighter particles. The microbial material will pass through with the fuel or oil.

**Q. Where in the system should I install Purafiner?**

- A.** Your system will be equipped with primary or important means of protection against contaminants. What you want Purafiner to accomplish is to break down the microbiological contamination to minute components so that it will pass through the filters into the engine and away in the exhaust. Install the Purafiner in the fuel supply from the tank before it enters any filtration or treatment unit.