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**MICROBIAL CONTAMINATION IN DIESEL FUEL – ARE NEW PROBLEMS
ARISING FROM BIODIESEL BLENDS?**

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Standard diesel fuel contains only a maximum of 0.2 cm³ water per litre of fuel from which a third of this is dissolved. The rest of the water settles at the tank bottom and is sufficient to serve as a biosphere for the microorganisms. Microbial products of decomposition form an emulsion of water and fuel and make separation off the water more difficult. Microbes are the cause for operational problems like fouling of tanks, pipes, filters and tank corrosion. These microbial problems in mineral diesel have been known for over 70 years. But nowadays the mineral diesel fuel is blended with Biodiesel such as FAME. Since the widespread of biodiesel blends an increase of operational problems are observed. Does the addition of FAME increase the risk of microbial contamination? Is it enhancing microbial growth?

The fatty acid esters, such as FAME, in mineral diesel produce an environment in which microbial growth is encouraged due to the ability of microorganisms to degrade natural fat and oil to yield energy for growth. The microbial growth can be enhanced at every stage in production, storage, distribution and in end users vehicles. Good housekeeping, monitoring and proper usage of an effective biocide are crucial measures to an anti-microbial strategy.