



CASE STUDY – GRO TAMAR® 71 AS A COMPONENT OF A DIESEL ADDITIVE PACKAGE

BACKGROUND

Fuel additives companies offer their own package recipes containing additives like flow improvers, cetane number improvers, detergents etc. just to name a few. The use of biocide as a further active ingredient has raised the interest of many companies worldwide looking for a more comprehensive multifunctional package.

Vink's extensive know-how on grotamar®71 is a pivot skill to support customers developing new products. Possible scenarios are the compatibility evaluation of single additive actives or of multifunctional packages with grotamar®71 without impairment of its single components' function.

To determine evaluation of the biocidal efficacy of the correct dosage of the package, the ASTM E1259 test was conducted.

SCENARIOS

Scenario A1

European diesel additive package supplier, European business
 Diesel B10
 2 additive packages at two concentrations + 50 ppm and 100 ppm grotamar®71
 Reinoculation after 7, 14 and 21d
 Test duration: 28d


The results of the microbial evaluation confirm the applicability of grotamar®71 as a fuel biocide. Even at low dosages such as 50 ppm and 100 ppm grotamar®71, the fuel-water system was fully sanitized for a period of 28 days.






Scenario A2

Global diesel package supplier,
European business
Customized diesel
4 Additives + 75 ppm and 100 ppm
grotamar®71
Reinoculation after 14d
Test duration: 28d

 The results of the microbial evaluation confirm the applicability of grotamar®71 as a fuel biocide. As a result of the nature of the additive, either 75 ppm or 100 ppm grotamar®71 has proven to be effective.

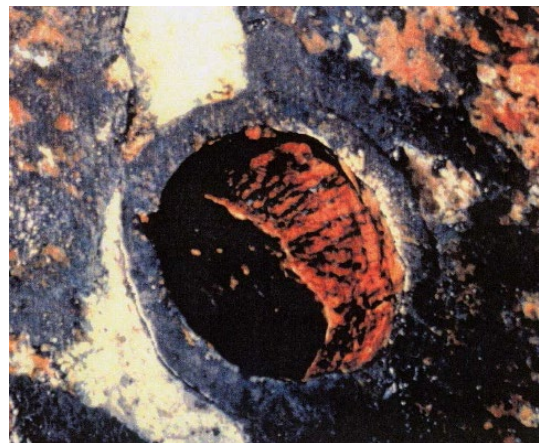
Scenario B1

German diesel package supplier,
global business
Customized diesel
4 additive packages with 450 ppm
grotamar®71
Reinoculation after 7, 14 and 21d
Test duration: 28d

 With this testing, the optimization of the multifunctional package was achieved.



BIOFILM IN A STORAGE TANK



MICROBIAL CORROSION IN A TANK

CHALLENGE

- Multifunctional additive package with biocide
- Microbial efficacy at the recommended concentration

SOLUTION

- MBO can be easily formulated
- MBO is efficient at low dosage

RESULT

- Chemical compatibility with diesel package formulation
- Microbial efficacy at low dosage