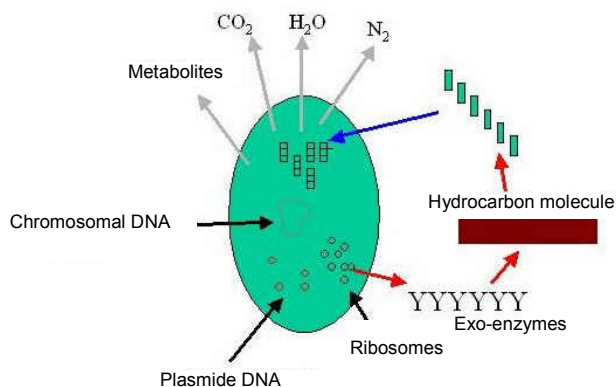


NATURAL CLEANING WITH MICROBE TREAT – L

Proteins, vegetable and animal oils and fats and all types of other organic waste products form a major problem for drainage systems. Blockages and offensive odours are for office complexes, apartment buildings, the food processing industry, hospitals, schools, restaurants and other organizations that have organic waste a very nasty problem.

The elimination of pollutants of this type does not appear in general terms to be so very difficult; use a strongly alkaline agent, copious amounts of hot water and the job looks done. Looks, because it is often not possible to dissolve the entire pollutant in this way and there remains a chance that the drainage system will become blocked. It will also result in large lumps of waste that come loose in the grease trap with every chance of odour nuisance. The grease trap will also rapidly become full; to empty and clean it is not only a tiresome, but also a costly chore.

Fortunately this does not usually have to be the case. Vecom has decades of experience with the application of Microbe Treat – L, a mixture of specially selected, living aerobic and anaerobic bacteria that eat the waste up as it were. These bacteria (which are found only in nature) have been selected specially for the elimination of organic pollution, blockages and odours (see intermezzo).



Schematic representation of a bacterium and the metabolism

The bacteria in Microbe Treat – L convert the pollutant that is present largely into harmless carbon dioxide, nitrogen and water. This results, not only in the disappearance of the pollutant in the drainage system, but also in a reduction of the residual pollution in the grease trap.

The result is often amazing: the odour nuisance is a thing of the past, the drainage system is again clean and the grease trap (hardly) ever needs to be emptied again.

General instructions

- ▶ Since the organic pollution is converted by proteins account has to be taken of the application temperature. Most proteins (and hence enzymes too) break down at temperatures in excess of 40 °C (think what happens when you boil an egg). At temperatures below 10 °C enzymes work very slowly.
- ▶ The pH of the system should be roughly neutral (between 5.5 and 8.5). This can be easily realized by not using strongly alkaline or acid media in the drains.
- ▶ Microbe Treat – L may never be used in combination with disinfectants or chloride bleaching agents. These would after all kill the active bacteria.
- ▶ Microbe Treat – L should be added undiluted. Daily dosages are required for an effective result.

Dosing instructions

GREASE TRAPS

Capacity	Initial dosage	Maintenance dosage
600 litre	1 litre	120 ml / day
1,200 litre	2 litre	240 ml / day
1,800 litre	3 litre	360 ml / day

For heavily polluted grease traps, provided they are still running, apply the initial dose every two days until the pot is clean. Then begin with the maintenance dosage.

SEPTIC TANKS AND SETTLING PITS

Capacity	Initial dosage	Maintenance dosage
6 m ³	4 litre	240 ml / week
12 m ³	8 litre	480 ml / week
18 m ³	12 litre	720 ml / week

Apply the initial dosage for 2 weeks or just as long as it takes until the pollution is eliminated. Then continue with the maintenance dosage.

DRAINAGE SYSTEMS

Cross section	Daily dosage	Weekly dosage
5 cm	30 ml	250 ml
10 cm	60 ml	500 ml
15 cm	90 ml	750 ml
20 cm	150 ml	1.000 ml

INTERMEZZO

Bacteria are small (1 – 6 µm) unicellular organisms that occur everywhere in nature. In order to survive they - like we - need food. However, in contrast to most of us, they observe a strict diet. This diet is not simply consumed, being rather with the assistance of proteins, so-called enzymes, converted to carbon dioxide and water.

Each bacterium requires in addition to trace elements ('vitamins') like nitrogen, sulphur and phosphorus, a characteristic source of carbohydrates (for example fatty acids, animal oil, vegetable oil, mineral oil etc.) in order to survive.

When a particular pollutant is present (take for example rotting timber in a forest, the garden and kitchen refuse in the garden or even mineral oil in the environment, as was the case with the oil disaster in Alaska), then bacteria that are attracted to 'food' like this will arrive automatically. In this way nature takes care of the tidying up: even in Alaska there is almost no trace left of the huge oil spill.



In cases of serious blockage first treat the grease traps. Wait two days with treatment of the drainage system. Operating time at least 16 hours.

SANITARY CLEANER

When Microbe Treat – L has to be used as detergent, just like conventional detergent, treat each wash hand basin, toilet etc. with approximately 100 ml of product.

Caution: Microbe Treat – L may never be used in combination with disinfectants or chloride bleaching agents. Daily application is required for an effective result.

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