

Biological Fat, Oil & Grease Removal

• Drains • Traps • Buffer tanks • Lift Stations • Sewer Lines



MicroCat®

- **Catering:** Drains - Sinks - Grease Traps
- **Industry:** Canteens - Company Sewer - Buffer tanks
Grease Traps Systems - Wastewater Treatment
- **Local Authorities:** Sewer Lines - Lift Stations

Let our bugs eat your Fat®

QM Environmental
Services Ltd.



QM Environmental Services LTD.

T: (+31) 10 470 13 69

E: info@qmes.nl

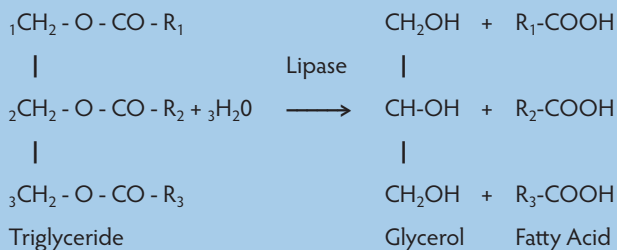
www.qmes.nl



Natural Drain, Sewer & Lift Station Maintenance

Proper waste treatment and free-flowing plumbing lines are critically tied to one another. Of the many products marketed which claim to aid plumbing problems, MicroCat® products are unique. They offer a combination of micro organisms, enzymes (biochemical catalysts) and other ingredients which act together naturally to soften, loosen, remove and break down greases, fats and oils in plumbing lines, sewer systems, pump stations and treatment plants, thus keeping them clean and odour free. Developed through the years, MicroCat® products, whether dry or liquid are capable of safely and effectively loosening and digesting the troublesome substances, which clog drainage systems and cause odours. When used on a regular basis, MicroCat® products can result in savings on operational and maintenance costs.

FOG's are composed out of lipids, e.g. triglyceride compounds, which are made of 1 glycerol molecule and 3 fatty acid molecules. The length of the fatty acid determines the hydrophobic nature fat. In other words, the level of insolubility of fat increases with the length of the fatty acids. When the carbon chains of the fatty acids in the triglyceride molecule contain six or more CH₂-groups, we refer to those compounds as fats. Animal fats contain primarily 12 to 18 CH₂-groups.



Microbial degradation of FOG

The microbial degradation of triglycerides can be divided in 5 steps. These steps involve the transport of the triglyceride towards the bacterial membrane, the absorption on the membrane, the hydrolysis of the triglyceride catalysed by the bacterial enzyme lipase. The transport of the created glycerol and fatty acids through the bacterial membrane and finally the metabolism of these compounds which produces new bacterial cells, carbon dioxide (CO₂) and water.



Products

MicroCat®-products that can be utilised for the degradation of fats and odour control in drains, sewers and pump stations are:

MicroCat®- DNTRF
 MicroCat®- BIOPOP
 MicroCat®- GEL
 MicroCat®- SXMRF
 MicroCat®- ANL
 MicroCat®- ECL
 MicroCat®- CRCS

MicroCat® Additives are blends of safe, natural ingredients (including microbes, enzymes, proteins, adsorbent, surfactants) in dry powder or in water-based liquid form for problem solving or regular maintenance operations in drains, sewers and Lift stations.

Key Advantages & Benefits of MicroCat® Use

- Free flowing Drains, Sewers and Lift stations
- Reduced emergency interventions
- No foul odours
- No more overflowing
- Less labour intensive sewer maintenance
- Above ground application with automatic dosing systems
- Cost-effective alternative for traditional maintenance

QM Environmental Services supplies automatic dosing systems for liquid and solid MicroCat® products. The dosing systems for the solid products hydrate the dry powder and dose on regular, preset times the desired amounts into drains, traps, lift station or treatment plant. This reduces the manual interaction and improves the action of the products.

Visit our website or contact us for more information

QM Environmental Services Ltd.
 De Vlinderhoven 68, 3124 BT Schiedam
 The Netherlands
 T: +31 (0)10 - 470 13 69
 F: +31 (0)84 - 746 63 28
 E: info@qmes.nl

www.qmes.nl

Let our bugs eat your Fat®