

## BIO CLEANING SOLUTIONS

### *Odorite™ Ultra Grease Trap Concentrate 10 X FF*

**Multi-action microbial consortium**  
**Superior grease degradation for effective grease trap treatment**



**Odorite™ Ultra Grease Trap Conc. 10 X FF** microbial consortium demonstrates superior enzyme performance for use in grease trap and drain line applications. This microbial blend includes unique strains for a more complete degradation of organic waste found in grease traps and in drain lines.

In their natural environment, bacteria produce hundreds of enzymes in response to the organic wastes present in their environment.

However, many different enzymes are required to completely break down a substrate so it is the bacteria with the most rapid production of these key enzymes that provide the most dramatic effects. In grease trap or drain line applications, **Odorite™ Ultra Grease Trap Conc. 10 X FF** produces the key enzymes to break down the proteins, starches, fats, oils, and greases found in those environments and use the components as food sources. Organic wastes are utilised by the bio enzyme consortium, so wastes aren't transferred downstream.

Grease is a major problem in grease traps and drain lines. Fats, oils and greases are composed of triglycerides. Many bacteria produce a lipase enzyme to break down the triglyceride into glycerol and fatty acids. The glycerol is easily degraded by many bacteria. However, fatty acids, which typically make up over 90% of the mass of the triglyceride, are difficult to degrade and can persist in a grease trap or drain line, causing clogging, pH drops and foul odours. The bio enzyme strain provides an additional benefit by degrading and utilising the recalcitrant portion of grease molecules, the long-chain fatty acids. When used as part of a daily maintenance program, **Odorite™ Ultra Grease Trap Conc. 10 X FF** will reduce grease trap pumping, maintain free flow in drains and reduce malodours.

**Odorite™ Ultra Grease Trap Conc. 10 X FF** incorporates proprietary inhibitory systems that provides excellent product stability and, upon addition to grease traps or drain lines, acts as an essential growth stimulant that promotes superior germination and outgrowth.

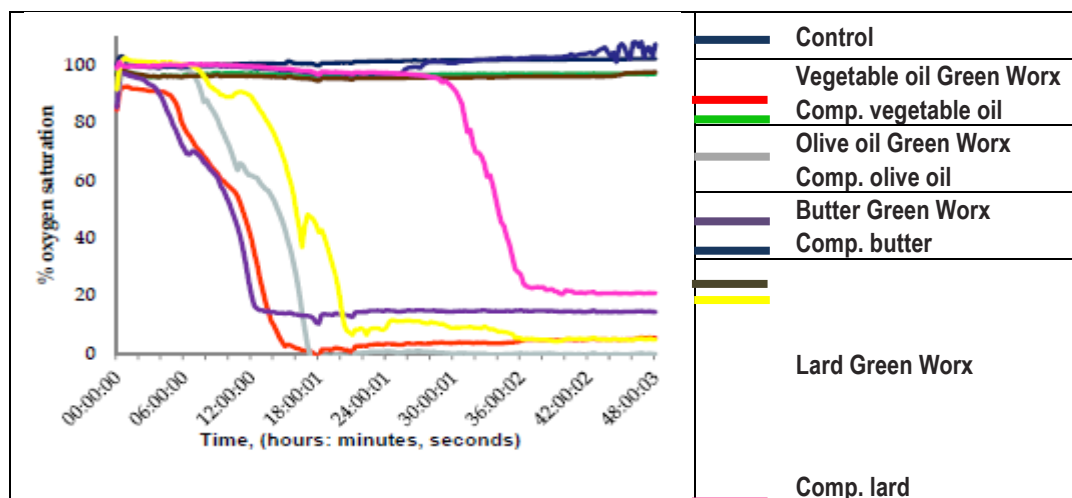
### DATA SHEET

Benefits

Features

- With regular application, **Odorite™ Ultra Grease Trap Conc. 10 X FF** will reduce trapped grease, maintain free-flow in drains, and reduce odours in grease traps and drain lines.
  - It does not transfer the grease downstream. The unique bacillus consortium degrades and digests grease and scum in grease traps and drain lines.
  - The active ingredients reduce the production of odours by inhibiting biological production of odour causing compounds such as hydrogen sulphide/
  - The bio enzymes degrade long-chain fatty acids that are known to be persistent in the environment causing the majority of maintenance and treatment problems.
  - The partial break down of grease causes pH to drop in a grease trap or drain line, creating an environment that is inhibitory to many bacteria. The bio enzyme strain is active at the low pH levels generated.
  - The bio enzyme consortium alleviates low pH problems by breaking down both short- and long-chain fatty acids, maintaining an environment more amenable to active microbial degradation.
  - **Odorite™ Ultra Grease Trap Conc. 10 X FF** demonstrates visible reductions in grease when field tested in restaurant grease traps.
- Specifically selected highly effective bacteria multi-strain formula for:
    - Production of lipase to cleave fats
    - Production of other extracellular enzymes to degrade food solids and sludge (excretion of high levels of amylase, cellulase, protease, urease, esterase and xylanase enzymes providing a wider range of degradation capabilities including short- and long-chain fatty acids, proteins, oils, grease, cellulose, carbohydrates, esters and plant cell walls)
    - Ability to survive in the low pH environment of an active grease trap
  - A synergistic blend that works in concert to provide superior performance in grease trap and drain line applications
  - Ability to work under aerobic and anaerobic conditions
  - A proprietary inhibitory system that provides excellent product stability and, upon addition to a drain line or grease trap, acts as an essential growth stimulant that promotes superior germination and outgrowth
  - Product contains Bacillus bacteria in 100% spore form for:
    - Extended product life
    - Product stability

**Comparison of Odorite™ Ultra Grease Trap Conc. 10 X FF and major competitor product:**



Green Worx bacteria show good activity against veg oil (red), olive oil (pale blue), butter (purple) & lard (yellow). Despite sample being from a major supplier and specifically for a grease trap application, it is only active against lard (pink). Veg oil, olive oil & butter, no better than the substrate control.

**Safety of bio enzyme consortium:**

**Odorite™ Ultra Grease Trap Conc. 10 X FF** contains a blend of safe Bacillus microorganisms. Toxicity studies done by an independent laboratory revealed that the bio enzyme consortium has no acute oral toxicity, no acute dermal toxicity, and no acute inhalation toxicity at maximal test dose. Studies in acute dermal irritation and acute eye irritation have found the bio enzyme consortium, as used in **Odorite™ Ultra Grease Trap Conc. 10 X FF** as non-irritating, it does not elicit a skin sensitisation reaction.

**PRODUCT CHARACTERISTICS**

- **Bacteria Counts** : 4 X 10<sup>9</sup>/ml
- **Bacteria Type** : Bacillus consortium producing the following enzymes:
  - ✓ **Protease** – breaks down proteins (e.g. meat, excreted/secreted proteins) into amino acids
  - ✓ **Lipase** – breaks down fats/grease into fatty acids & glycerol. If not broken down, fats can go rancid and lead to off-odours and blocked drains/fat grease traps. Prevents congealing further downline.

- ✓ **Amylase** – starch acts as a glue for dirt – amylases catalyse the break-down of starch into sugars which are then further used as a food source by the bacillus
  - ✓ **Cellulase** – breaks down cellulosic material
  - ✓ **Urease** - catalyzes the hydrolysis of urea into break-down products.
  - ✓ **Esterase** - splits esters into an acid and an alcohol in a chemical reaction with water called hydrolysis. Esters have characteristic odours most of which are pleasant/fruity, however can also include onion/garlic and worse odours
  - ✓ **Xylanase** – help in breaking down plant cell walls.
    - What this means – the bacillus use the multitude of enzymes produced to break down the components of malodour and staining to provide microbial cleaning at the smallest level of dirt/contamination.
- **Salmonella** : Not detected
  - **Fragrance** : No fragrance
  - **Shelf-life** : Two years; maximum loss of 1.0 log at recommended storage condition
  - **Appearance** : Tan liquid

**Formulation recommendations:**

- Mix well and use entire contents of 5 and 25 litre container.
- Dilute one part concentrate with approximately 9 parts of water.
- Blend in remainder of formulation (colour and/or fragrance)
- Blend slowly for a minimum of thirty minutes to assure proper spore dispersion in solution.
- Do not allow product to stand without agitation during packaging process.

**Storage and handling:**

- Store in cool and dry places in closed containers at 10°- 40°C
- Wash hands thoroughly with warm, soapy water after contact
- Avoid eye contact.

**Available packaging:**

5 and 25 litre containers in concentrate

**Recommended Application Feed Rate at Ready to Use Formulation only:**

Please note that all dosage guidelines are recommendations only as grease, contents and grease loading may differ.

**1. GREASE TRAPS**

Trap Size	Dosing
750 litres	300 ml per day
2000 litres – 5500 litres	500 – 600 ml per day
5500 litres or larger	900 – 1200 ml per day

**2. DRAIN LINES**

Size	Frequency	Notes	Dosing
Residential / Hotel Slow Running Drains	3-day start-up	Run hot water before dosing product directly into drain. For best result dose at bed time or when drain will not be used for several hours.	60 – 120 ml/day
Residential / Hotel Slow Running Drains Maintenance	Ongoing	For best result dose at bed time or when drain will not be used for several hours.	60 – 120 ml/week
Commercial Slow Running Drains	7-day start-up	For best results dose at closing time or during quite times.	180 – 240 ml/day
Commercial Maintenance	Ongoing	For best results dose at closing time or during quite times.	120 – 240 ml/week
Floor Drains	Ongoing	Start-up – treat drains for 3 – 7 days to achieve better flow rates. Maintenance dose weekly. For best results dose at closing time or during quite times.	Mix 120ml per litre to treat 6 – 8 drains

### 3. INDUSTRIAL APPLICATION

Abattoirs		
3-Day Start up	For best results, dose as far away from disinfection run-off from cleaning operations.	Initial Dosage 0.1% w/v of dam
Ongoing	For best results, dose as far away from disinfection run-off from cleaning operations.	Daily Dosage 0.03% w/v of influent volume

The information contained in this leaflet is to the best of our knowledge, true and accurate, but any recommendations or suggestions which may be made are without guarantee since the conditions of use are beyond our control. No license or immunity under any patents is granted or implied. **Green Worx CS does not guarantee that the above products can be used as described without prior positive testing or the use of these products does not infringe third parties' patent rights.**

Manufactured and supplied by **Green Worx Cleaning Solutions**

## Cleaner. Greener. Smarter.



vegan SA



+27 11 708 6626    info@greenworx.eco    www.greenworx.eco