



PROBIOTIC CONCENTRATE

Isoclean Probiotic Concentrate is a liquid probiotic / bacterial concentrate offering a high bacterial specification, multi-strain, and spore based product needed for use in grease traps, drain and drain line maintenance, improving septic and waste degradation and cleaning, plus odour control applications.

Isoclean Probiotic Concentrate is designed as a bio-technical aid to treatment of organic waste material offering the following advantages: -

Benefits:

- Liquefaction + reduction of solids
- Reduction of odours
- Easier waste disposal + cleaning of soiled areas
- Waste water management - effluent tanks, slurry ponds, contaminated water areas

Directions:

Shake before use

1. **FOOD WASTE – DOMESTIC & INDUSTRIAL** – reducing blockage of drains, pipes: treatment of effluent not on main drainage: reduction of odours & general purpose cleaning

Area	Dilution	Initial Dose Rate	Regular Maintenance Rate	Method of Application
Effluent tanks Cess pit	As is diluted 1:19	400g per typical house	100g per month	Through any convenient access point e.g. toilet
Urinals Bathroom	As is 1:19		Spray twice daily Daily cleaning	As per cleaning method
Drains	As is diluted 1:19	15 g	15 g/month	Direct

2. **AGRICULTURE WASTE** – reduction of high solids/crusting of waste: liquefaction and cleaning (i.e. cowsheds, piggeries, poultry farms etc.)

Area	Dilution	Initial Dose Rate	Regular Maintenance Rate	Method of Application
Buildings	1:19	1 kg per 10 tons Animal weight.	Weekly for two weeks, then 500 g per week	Spray over surfaces.
Floors		1 kg/ 10 000 litre	½ kg/10 000 litre per week	Spray on surface.
Effluent pits Ponds & Slurry tanks		1 kg/ 250 000 litre	Weekly	Spray over cone.

3. **SEWAGE PLANTS** - general aid to processing.

Area	Dilution	Initial Dose Rate	Regular Maintenance Rate	Method of Application
Trickling filters	1:19	1 kg/ 4.5 million litres	500g/4.5 million litre per week	Add to primary settling tank
Anaerobic digesters		500g/ 45 000 litres	Repeat for 3 days then per week	Add to inflow pipe
Retention ponds Activated sludge				

4. **ABBATOIRS** – for easier handling of high protein/fats in concentrated areas.

Area	Dilution	Initial Dose Rate	Regular Maintenance Rate	Method of Application
Total effluent	1:19	4 kg /450 000 litre per day	Repeat for 3 days then ½ kg/450 000 litre	Add manually
Grease traps		100g/ 500 litre capacity	50g/ 500 litre per week	Pour through drain.

Ingredients:

Bacteria Counts: 2 X 10⁹ /ml

Bacteria Type: **Bacillus consortium** Enzyme production

- **Protease** – breaks down proteins (e.g. meat, excreted/secreted proteins) into amino acids.
- **Lipase** – breaks down fats/grease into fatty acids and glycerol. If not broken down, fats can go rancid and lead to off-odours and blocked drains/fat grease traps.
- **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. o 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.

Appearance: Straw coloured

Fragrance: Neutral

Form: Liquid

Shelf life: 24 months (in un-opened container)

pH: 7.0-8.0 (20X) (Performance properties effective pH range - 5.0-10.0)

Temperature Range: – 3 to 63 degrees Celcius

Safety of Isoclean Probiotic Liquid:

Isoclean Probiotic Concentrate contains a blend of safe Bacillus microorganisms / Probiotics. All microbes have been identified to a sepsis level by 16s rDNA sequencing and confirmed to belong to Biosafety Level 1, as defined by the National Institute of Health (NIH) and to Risk Group 1, as defined by EU Directive 2000/54/EC.

The information contained in this leaflet is to the best of our knowledge, true & 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. Isoclean 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.