Type: Dual-function liquid — extracted enzyme system plus live microbial consortium	**Action Onset:** Enzymatic action within seconds of application	**Packaging:** 5 L, 25 L and 1000 L

GEARTH DrainZyme is a dual-function enzymatic and biological unblocking agent for drains, grease traps, plumbing lines, sinks, showers, surgical drains, pump stations and sewer lines. It rapidly digests organic build-up and then keeps lines free-flowing, with sustained odour, fly and pathogen control.

Conventional chemical drain products temporarily change the state of a blockage, which then re-forms further downstream. DrainZyme instead converts the blockage permanently: the digestive microbes in the formulation metabolise fats, oils, greases and organic waste into carbon dioxide and water. GEARTH probiotics are cultivated from South African soils and manufactured locally, giving the cultures a home-ground performance advantage — they metabolise faster, reproduce quicker and survive in drains, traps and waste systems longer than imported cultures.

1 TWO-STAGE MODE OF ACTION

Stage one is enzymatic and immediate. The extracted MultiZyme five-enzyme system — Protease, Alpha-amylase, Pectate Lyase, Lipase and Mannanase — begins hydrolysing fats, oils, greases, blood and other organic matter into their component parts within seconds of application, unlike biological-only products which must first wait for microbial activation.

Stage two is biological and long-lived. The billions of microbes carried in the formulation secrete their own digestive enzymes, double every few minutes, colonise the affected surfaces and continue digesting organic waste for days to weeks after dosing.

2 NINE-ENZYME BIOLOGICAL PRODUCTION SYSTEM

- Lipase — fats, oils and greases
- Amylase — starches
- Protease — proteins
- Cellulase — cellulose and plant fibre
- Hemicellulase and Xylanase — hemicellulose and plant polysaccharides
- Esterase — ester bonds in fats and oils
- Urease — urea
- Phosphatase — organic phosphates

3 ODOUR & PATHOGEN CONTROL

Organic effluent is the primary source of the foul odours that affect clients, neighbours and staff. DrainZyme rapidly displaces the anaerobic bacteria responsible for those noxious malodours, removing the cause rather than perfuming the symptom.

Listeria and other pathogens can resist conventional disinfectants such as quaternary ammonium compounds. Through Competitive Exclusion, GEARTH probiotics outcompete odour- and pathogen-forming bacteria for food and space, colonise the system and establish a long-term healthy microbial balance. Organic targets are broken down permanently into carbon dioxide and water rather than being masked or displaced downstream.

4 APPLICATIONS

- Drains, basins, kitchen sinks and showers
- Grease traps and grease interceptors
- Sewer lines and reticulation
- Surgical and clinical drains
- Pump stations and wet wells
- Plumbing lines subject to recurring organic blockage

5 DIRECTIONS & DOSAGE

Application	Shock Dose	Maintenance Dose
Domestic	250 ml	125 ml per week
Commercial	Up to 500 ml	Up to 250 ml per week

Dose at the close of business, during quiet periods, or at night before sleeping so the product has undisturbed contact time in the line.

6 KEY BENEFITS

- Rapidly clears organic blockages and restores flow
- Reduces COD, TSS and BOD loading in the effluent stream
- Actively benefits septic tanks, sewer lines and wastewater treatment works
- Sustained odour reduction and fly control
- Long-term pathogen control by Competitive Exclusion
- Reduces call-out, jetting and pump maintenance costs

7 STORAGE & SHELF LIFE

Shelf Life	Stable for 12 months
Storage Conditions	Store at ambient temperature out of direct sunlight, sealed when not in use.
Packaging	5 L, 25 L and 1000 L

This Technical Data Sheet reflects GEARTH's current product specification and application guidance at the date of issue. GEARTH (Pty) Ltd continually develops its formulations and reserves the right to revise specifications without prior notice. Because site conditions, substrates and effluent loads vary, the user remains responsible for confirming suitability for a specific application — GEARTH technical staff are available to assist with site-specific dosing and trial protocols. Handle all products in accordance with the applicable Safety Data Sheet and South African health, safety and environmental legislation.