Enzyme System: Protease, alpha-amylase, pectate lyase, lipase, mannanase	**Dilution:** 1% to 2% with running water	**pH:** Undiluted 6 – 7 | at 1% neutral

GEARTH SurgiZyme is a high-performance, rapid-acting five-enzyme cleaner for surgical, medical and dental instruments as well as other plastic and metal surfaces. It removes and breaks down organic soils — including human tissues and fluids — at neutral pH, offering a broader range of material compatibility than alkaline chemistries and making it well suited to the protection of delicate instruments.

Its highly concentrated formula is effective at low concentrations and at lower temperatures than traditional detergents, delivering excellent cost savings in smaller, more ergonomic packaging.

1 KEY FEATURES & BENEFITS

- Five-enzyme system: protease, alpha-amylase, pectate lyase, lipase and mannanase
- Digests human organic waste tissues and fluids
- Works at neutral pH — broader material compatibility than alkaline chemistries
- Protects delicate instruments
- Rapid results within minutes of application
- Highly concentrated and economical — effective at low concentrations
- Effective at lower temperatures than traditional detergents
- Effective in hard water environments
- Phosphate free
- Environmentally friendly and biodegradable formulation
- Smaller, more ergonomic packaging for the same cleaning capacity

2 APPLICATIONS

- Ultrasonic baths
- Automated endoscope washers
- Disinfectors and instrument washers
- Immersion baths
- Conventional hand washing of instruments
- Surgical, medical and dental instruments, and other plastic and metal surfaces
- Hospitals, clinics, dental practices and veterinary facilities

3 DIRECTIONS & USAGE

- Step 1 — Dilute: Dilute at 1% to 2% with running water.
- Step 2 — Immerse: Ensure all jointed instruments are wide open, then fully cover them in solution.
- Step 3 — Soak: Soak for a minimum of 15 minutes, and up to 30 minutes for heavy soils.

- Step 4 — Rinse and dry: Rinse thoroughly with running water and dry well with a clean cloth.
- Step 5 — Sterilise: Sterilise all instruments as normal.
- Change the solution every 24 to 48 hours, or sooner once saturated and dirty. Effective at room temperature (20 °C), but for optimal enzymatic performance use warmer water at 32 – 43 °C. Do not mix with other disinfectants or detergents. Close the lid tightly after use.

4 TECHNICAL SPECIFICATIONS

Physical State	Liquid concentrate
Appearance	Transparent to light yellow
pH — Undiluted	6 – 7
pH — at 1%	Neutral
Enzyme System	Protease, alpha-amylase, pectate lyase, lipase and mannanase
Dilution	1% to 2% with running water
Soak Time	15 minutes minimum; up to 30 minutes for heavy soils
Operating Temperature	Effective at 20 °C; optimal enzymatic performance at 32 – 43 °C
Solution Life	Change every 24 to 48 hours, or sooner when saturated
Water Compatibility	Effective in hard water environments
Phosphate Content	Phosphate free
Material Compatibility	Neutral pH gives broader compatibility than alkaline chemistries; suited to delicate instruments
Chemical Incompatibility	Do not mix with other disinfectants or detergents
Biodegradability	Biodegradable
Country of Manufacture	South Africa

5 STORAGE & SHELF LIFE

Shelf Life	Stable for 1 year
Storage Conditions	Store at ambient temperature out of direct sunlight. Close the lid tightly after use.

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.