GEARTH

SAFETY DATA SHEET

SurgiZyme

GHS REV 10

1 Identification

Product identifier	SurgiZyme
Other means of identification	No data available
Recommended use	Five-enzyme surgical instrument cleaner (proprietary enzyme blend).
Restrictions on use	No data available
Supplier	GEARTH (Pty) Ltd, 96 Lazy River Road, Centurion 0157, Gauteng, South Africa
Telephone	012 004 8183 | info@gearth.co.za
Emergency telephone number	**066 214 2274 (24 hours)**

2 Hazards identification

2.1 Classification of the substance or mixture

GHS classification	Not classified under GHS Rev 10 by the source data. Source hazard classification (pre-GHS): R41 risk of serious damage to eyes; R43 may cause sensitisation by skin contact. Source Section 15 lists corresponding hazard statements H302, H315, H317, H318.

2.2 Label elements

Hazard pictograms	No data available
Signal word	No data available
Hazard statements	H302 Harmful if swallowed. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H318 Causes serious eye damage (source Section 15 statements).
Precautionary — prevention	Avoid contact with skin; wear suitable gloves and eye / face protection (source S24, S37/39).
Precautionary — response	In case of contact with eyes, rinse immediately with plenty of water (source S26).
Precautionary — storage	No data available
Precautionary — disposal	No data available

2.3 Other hazards

OTHER HAZARDS DISCLOSURE

The organisms used are non-pathogenic but can cause infection in contact with open wounds — cover open wounds when in use (source data).

3 Composition / information on ingredients

Ingredient	CAS no.	EC no.	Conc. % (w/w)	Classification
Enzyme blend — protease, alpha-amylase, lipase, pectate lyase, mannanase	9014-01-1	Not available in source	1 – 5%	Xn; R22, R41-38 (source, 67/548/EEC)
Glycol (propylene glycol)	57-55-6	Not available in source	5 – 15	Xi; R41-38 (source, 67/548/EEC)
Preservative	2682-20-4	Not available in source	1 – 5	Xn; R22, R41 (source, 67/548/EEC)
Stabiliser	1330-43-4	Not available in source	<5	Xn; R22, R41 (source, 67/548/EEC)
Anionic agent (labelling component)	No data available	No data available	30 – 50%	No data available
Total			**100**	

Exact composition percentages are withheld as a trade secret in accordance with the HCA Regulations, 2021. The classification of withheld components is reflected above.

4 First-aid measures

4.1 Description of first-aid measures

Inhalation	Remove victim to fresh air; rest and keep warm. If symptoms of irritation and/or sensitisation occur (shortness of breath, wheezing or laboured coughing), seek medical attention.
Skin contact	Remove contaminated clothing and wash skin thoroughly with soap and water. If irritation persists, seek medical attention.
Eye contact	Flush with plenty of water, ensuring eyelids are held open. If irritation persists, seek medical attention.
Ingestion	Drink water to dilute. Do not induce vomiting. Seek medical attention.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms and effects	Risk of serious damage to eyes; may cause sensitisation by skin contact. Organisms used are non-pathogenic but can cause infection in contact with open wounds.

4.3 Indication of any immediate medical attention and special treatment needed

Medical attention	Eye wash fountain and normal washroom facilities recommended. Treat symptomatically.

5 Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media	All types of extinguishers may be used: water or foam.
Unsuitable extinguishing media	No data available

5.2 Special hazards arising from the substance or mixture

Specific hazards / hazardous combustion products	If the substance is involved in a fire, oxides of carbon and nitrogen may be evolved.

5.3 Advice for firefighters

Protective equipment for firefighters	Self-contained breathing apparatus should be worn.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures	Use protective equipment. Avoid formation of dust, splashing and formation of aerosols.
Environmental precautions	None (source data).
Methods and material for containment and cleaning up	Clean up by collection (see Section 8 for PPE).

7 Handling and storage

7.1 Precautions for safe handling

Safe handling	Handle under conditions of good industrial hygiene and in conformity with local regulations to avoid unnecessary exposure. The microorganisms used are selected from the natural environment and are non-pathogenic to humans, animals and plants; cover open wounds when in use. Gloves recommended to reduce exposure.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions	Store in a cool, dry, well-ventilated area; keep containers tightly closed when not in use. Avoid freezing and temperatures above 45 °C to preserve biological stability. Do not store in metallic containers.
Packaging	5 kg, 25 kg, 200 kg and 1000 kg.
Shelf life	No data available
Incompatibilities	Strong acids or alkali compounds may inactivate biological cultures; avoid strong oxidising agents.

8 Exposure controls / personal protection

8.1 Control parameters — occupational exposure limits

Substance	OEL type	Value	Source
Product as supplied	—	None established	HCA Regs 2021 Annexure 2

8.2 Appropriate engineering controls

Engineering controls	The user should decide on PPE and engineering controls as part of a formal exposure risk assessment; the measures below are a minimum (source data).

8.3 Individual protection measures

Eye / face protection	Safety glasses capable of giving chemical protection, to prevent eye exposure.
Skin / hand protection	Avoid prolonged or frequent repeated skin contact, especially with broken skin. Chemical protective gloves to a standard; wear chemical protective clothing for prolonged/frequent direct handling. Glove material: Chemical protective gloves to a recognised standard (source data); breakthrough time: Usage periods should not exceed the glove manufacturer's stated breakthrough times (source data)
Respiratory protection	No special ventilation is usually necessary. Filter type: Not applicable
Thermal hazards	No data available

9 Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	Liquid (clear to opaque)
Colour	Clear – opaque
Odour	Chemical
Melting point / freezing point	Not applicable per source
Boiling point or initial boiling point and boiling range	Not determined (source data)
Flammability	Not applicable per source; auto-flammability not determined
Lower and upper explosion limit / flammability limit	No data available
Flash point	Not determined (source data)
Auto-ignition temperature	No data available
Decomposition temperature	No data available
pH (concentration and temperature stated)	7.5 – 9 (concentration and temperature not stated in source data)
Kinematic viscosity	No data available
Solubility	Soluble in water; fat solubility not determined
Partition coefficient n-octanol/water (log Kow)	No data available
Vapour pressure	Not determined (source data)
Density and/or relative density	Relative density not determined (source data)
Relative vapour density	No data available
Particle characteristics	Not applicable

9.2 Other information

Explosive properties	Predicted not explosive based on chemical structure (source data)
Oxidising properties	Not determined (source data)
Bulk density	No data available
Active solids	No data available

10 Stability and reactivity

Reactivity	Not reactive.
Chemical stability	Stable. Working temperature range 6 – 60 °C.
Possibility of hazardous reactions	If involved in a fire, oxides of carbon and nitrogen may be evolved.
Conditions to avoid	Excessive temperature variations — below 0 °C or above 45 °C.
Incompatible materials	Strong acids, alkali compounds and strong oxidising agents may inactivate biological cultures.
Hazardous decomposition products	None (source data).

11 Toxicological information

Likely routes of exposure	Eye and skin contact; inhalation of aerosols; ingestion.
Symptoms related to exposure	Risk of serious damage to eyes; possible skin sensitisation; irritation/sensitisation symptoms on inhalation (shortness of breath, wheezing, laboured coughing).
Delayed and chronic effects	No data available

Numerical measures of toxicity

Endpoint	Species	Route	Value
No data available	No data available	No data available	No data available

Source states acute health effects (swallowed, skin, inhaled) and irritation (eye, skin) not determined; hazard statements carried from source Section 15.

Acute toxicity — dermal	No data available
Acute toxicity — inhalation	No data available
Skin corrosion / irritation	Irritating to skin — R38 / H315 (source data).
Serious eye damage / irritation	Risk of serious damage to eyes — R41 / H318 (source data).
Respiratory sensitisation	No data available
Skin sensitisation	May cause sensitisation by skin contact — R43 / H317 (source data).
Germ cell mutagenicity	No data available
Carcinogenicity	No data available
Reproductive toxicity	No data available
STOT — single exposure	No data available
STOT — repeated exposure	No data available
Aspiration hazard	No data available

12 Ecological information

Aquatic toxicity

Species	Endpoint	Value	Duration
No data available	No data available	No data available	No data available

Source: the preparation is not anticipated to pose any environmental hazard; no data on toxicity to soil organisms, plants or terrestrial animals.

Persistence and degradability — method	No data available
Persistence and degradability — result	Expected to biodegrade rapidly; no information on anaerobic biodegradation.
Bioaccumulative potential	Not anticipated to bioaccumulate (source statement).
Mobility in soil	No information available (source statement).
Other adverse effects	No ozone depletion, photochemical ozone creation or global warming potential; adverse effects in sewage treatment plants not anticipated (source data).

13 Disposal considerations

Waste residues	No data available
Disposal methods	Dispose of by incineration or landfill in accordance with local regulations.
Contaminated packaging	No data available
Waste classification (NEM:WA 59 of 2008, GN R635)	No data available

14 Transport information

Mode	UN no.	Proper shipping name	Class	PG
Road (SANS 10228 / ADR)	Not applicable	Not regulated	Not applicable	Not applicable
Rail (RID)	Not applicable	Not regulated	Not applicable	Not applicable
Sea (IMDG)	Not applicable	Not regulated	Not applicable	Not applicable
Air (IATA)	Not applicable	Not regulated	Not applicable	Not applicable

Marine pollutant	No data available
Transport in bulk (IMO instruments)	Not applicable
Special precautions for user	No data available

15 Regulatory information

Safety, health and environmental regulations specific to the product	Occupational Health and Safety Act 85 of 1993; Regulations for Hazardous Chemical Agents, 2021; NEM:WA 59 of 2008; None identified
NRCS VC 8054 status	No data available
Ecolabel certification	No data available
Chemical safety assessment	No data available

16 Other information

Date of preparation	18 August 2026
Latest revision	Rev 1.0, 18 August 2026
Summary of changes	First GEARTH issue (Rev 1.0). Safety content transferred unchanged from the source manufacturer's MSDS (undated source MSDS); no data re-tested or re-derived.
Full text of hazard (H) statements	H302 Harmful if swallowed. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H318 Causes serious eye damage.
Full text of precautionary (P) statements	S24 Avoid contact with skin. S26 In case of contact with eyes, rinse immediately with plenty of water. S37/39 Wear suitable gloves and eye / face protection.
Key to abbreviations	GHS — Globally Harmonized System; OEL — occupational exposure limit; STOT — specific target organ toxicity; PG — packing group; SG — specific gravity; CAS — Chemical Abstracts Service; HCA — hazardous chemical agents.
Classification method	Hazard information carried over from the source manufacturer's assessment (pre-GHS format). Classification against UN GHS Rev 10 criteria to be confirmed.
Training advice	Use only according to the instructions for use. Personnel handling the concentrate should be familiar with the first-aid and spill measures in Sections 4 and 6.
Disclaimer	This information is based on present knowledge and describes the product for the purposes of health, safety and environmental requirements only. It does not constitute a guarantee of the properties of the product. Final determination of suitability for any use is the sole responsibility of the user.

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GHS REV 10

SIGN-OFF

Prepared by	GEARTH (Pty) Ltd
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