

GOEDEBOER (Pty) Ltd

288 Molopo ave, Sinoville, Pretoria, 0182

Cell: 083 628 3080 | E-mail: peter@goedeboer.co.za

SECTION 1: IDENTIFICATION

GHS Product Identifier

Product name: SUSTAINABUGS

Other means of identification

Agricultural and Horticultural use as a plant growth and soil enhancer

Recommended use of the chemical and restrictions on use

Agricultural and Horticultural use as a plant growth and soil enhancer

Supplier's Details:

Name: GOEDEBOER (Pty) Ltd

Address: 288 Molopo ave, Sinoville, Pretoria, 0182

Cell: 083 628 3080 | E-mail: peter@goedeboer.co.za

Telephone: +27 (0) 83 628 2266

Emergency Phone Number: +27 (0) 836283080

SECTION 2: HAZARD IDENTIFICATION

General hazard statement

Not classified, the classification criteria are not met.

GHS classification in accordance with: OSHA (29 CFR 1910.1200)

Not a hazardous substance or mixture.

GHS label elements, including precautionary statements

Not a hazardous substance or mixture.

Other hazards which do not result in classification

Not a hazardous substance or mixture.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Substances/Components

Component	CAS Registry No	Concentration
<i>Bacillus licheniformis</i>	68038-66-4	1%
<i>Bacillus subtilis</i>	68038-70-0	1%
<i>Bacillus amyloliquefaciens</i>	68038-60-8	1%
<i>Bacillus thuringiensis</i>	68038-71-1	1%
<i>Bacillus megaterium</i>	68038-67-5	1%
<i>Bacillus pumilus</i>	1383428-50-9	1%
<i>Pseudomonas fluorescens</i>	68332-93-4	1%
<i>Azotobacter chroococcum</i>	68038-58-4	1%
<i>Lactobacillus camelliae</i>	Not available	1%
<i>Lactobacillus ghanensis</i>	Not available	1%

SECTION 4: FIRST-AID MEASURES**Description of necessary first-aid measures**

General advice:	Consult a physician. Show this safety data sheet to the doctor in attendance.
If inhaled:	Move to fresh air. Keep patient warm and at rest. If symptoms persist, call a physician.
In case of skin contact:	Wash off thoroughly with plenty of soap and water, if available with polyethylene glycol 400, subsequently rinse with water. If symptoms persist, call a physician.
In case of eye contact:	Wash off immediately with plenty of water for at least 15 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eyes. Get medical attention if irritation develops and persists.
If swallowed:	Never give anything by mouth to unconscious person. Rinse mouth with water. Consult a physician.
Personal protective equipment for first-aid responders:	None

Most important symptoms/effects, acute and delayed

No symptoms known or expected.

Indication of immediate medical attention and special treatment needed, if necessary

Treat symptomatically. There is no specific antidote.

SECTION 5: FIRE-FIGHTING MEASURES**Suitable extinguishing media**

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Specific hazards arising from the chemical

Dangerous gasses are evolved in the event of a fire.

Special protective actions for fire-fighters

Wear self-contained breathing apparatus for firefighting if necessary.

Further information

Contain the spread of firefighting media. Do not allow run-off from firefighting to enter drains or water courses.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Avoid dust formation. Avoid breathing vapours, mist or gas. For personal protection see Section 8.

Environmental precautions

Should not be released into the environment. See Section 12 for additional ecological information.

Methods and materials for containment and cleaning up

Sweep up and shovel. Keep in suitable, closed containers for disposal. Clean with disinfectants.

Reference to other sections

Information regarding safe handling, see Section 7.

Information regarding personal protective equipment, see Section 8.

Information regarding waste disposal, see Section 13.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling

No specific precautions required when handling unopened packs/containers; follow relevant manual handling advice.

Ensure adequate ventilation.

Conditions for safe storage, including any incompatibilities

Store in a place accessible by authorised persons only. Store in original container. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from direct sunlight. Protect from frost. Keep away from food, drink and animal feeding stuffs.

Specific end use(s)

Keep away from food, drink and animal feeding stuffs.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Appropriate engineering controls

None required

Individual protection measures, such as personal protective equipment (PPE):

Pictograms



Eye/face protection

Safety glasses

Skin protection

None

Body protection

Refer to COSHH assessment (Control of Substances and Hazardous to Health (Amendment) Regulations 2004.) Engineering controls should be used in preference to personal protective equipment whenever practicable. Refer also to COSHH Essentials.

Personal protective equipment

In normal use and handling conditions, please refer to the label and/or leaflet. In all other cases the following recommendations would apply.

Respiratory protection

Respiratory protection should only be used to control residual risk or short duration activities, when all reasonably practicable steps have been taken to reduce exposure at source e.g., containment and/or local extract ventilation. Always follow respirator manufacturer's instructions regarding wearing and maintenance. Wear respirator with a particle filter mask (protection factor 20) conforming to European Norm EN149FFP3 or EN140P3 or equivalent.

Thermal hazards

Not applicable.

Control banding approach

No data available.

Environmental exposure controls

No data available

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES AND SAFETY CHARACTERISTICS

Physical state:	Liquid
Appearance:	Dark brown liquid
Colour:	Dark brown
Odour:	Sweet earthy
Odour threshold:	No data available
pH:	3.0
91°C Flash point:	No flash point
Evaporation rate:	No data available
Flammability	no data
Vapor pressure:	No data available
Relative vapor density:	No data available

Density and/or relative density:	ca. 1.05 – 1.16g/cm ³ (20°C)
Solubility:	Soluble in water
Partition coefficient n-octanol/water (log value)	Not applicable
Auto-ignition temperature:	No oxidizing properties
Decomposition temperature:	No information available on the product
Kinematic viscosity:	N/A
Explosive properties:	Not explosive 92/69/EEC, A.14 / OECD 113
Oxidizing properties:	No oxidizing properties

Particle characteristics

Not applicable

Further safety characteristics (supplemental)

Not known

SECTION 10: STABILITY AND REACTIVITY

Reactivity

Thermal decomposition. Stable under normal conditions.

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

No hazardous reactions when stored and handled according to prescribed instructions.

Conditions to avoid

Freezing, extreme temperature and direct sunlight.

Incompatible materials

Store only in the original container.

Hazardous decomposition products

No decomposition products expected under normal conditions of use.

SECTION 11: TOXICOLOGICAL INFORMATION

Information on toxicological effects:

Acute toxicity

Non-toxic

Skin corrosion/irritation

Based on available data, classification data are not met.

Serious eye damage/irritation

No known significant effects or critical hazards. May cause irritation due to mechanical action.

Respiratory or skin sensitization

Based on available data, classification criteria are not met.

Germ cell mutagenicity

Based on available data, the classification data are not met.

Carcinogenicity

Did not cause specific target organ toxicity in experimental animal studies.

Reproductive toxicity Test not required for microorganisms. **Summary of evaluation of the CMR properties**

Test not required for microorganisms.

STOT-single exposure

Based on available data, classification data are not met.

STOT-repeated exposure

Based on available data, classification data are not met.

Reproductive toxicity

Test not required for microorganisms. **Summary**

of evaluation of the CMR properties

Test not required for microorganisms.

Aspiration hazard

Based on available data, classification data are not met.

SECTION 12: ECOLOGICAL INFORMATION**Toxicity**

A natural occurring consortium of soil bacteria. Produces cytolytic enzymes, proteases, and other enzymes that degrade a variety of natural substrates and contribute to nutrient recycling.

Persistence and degradability

According to OECD method 302B, this product is classified as inherently biodegradable and therefore unlikely to persist in the environment.

Bio accumulative potential

According to OECD method 302B, this product is classified as inherently biodegradable and therefore unlikely to persist in the environment.

Mobility in soil

Due to water solubility, mobile in soil.

Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not concluded.

Endocrine disrupting properties

Is a naturally occurring soil bacteria.

SECTION 13: DISPOSABLE CONSIDERATIONS

Disposable methods:

Product disposal

In accordance with current regulations and, if necessary, after consultation with the site operator and/or with the responsible authority, the product may be taken to a waste disposal site or incineration plant. Advice may be obtained from the local waste regulation authority.

Packaging disposal

Small containers (<10 L or <10 kg) should be rinsed thoroughly using an integrated pressure rinsing device, or, by manually rinsing three times. Add washings to sprayer at time of filling. Dispose of empty and cleaned packaging safely. Follow advice on product and/or leaflet.

Waste treatment

Dispose according to local authority regulations and rules.

Sewage disposal

Dispose according to local authority regulations and rules.

SECTION 14: TRANSPORT INFORMATION

UN Number:	None
UN Proper Shipping Name:	None
Transport Hazard Class(es):	None
Packing Group:	None
Environmental Hazards:	None
Special Precautions for User:	None
Transport in bulk according to IMO instruments:	None

SECTION 15: REGULATORY INFORMATION

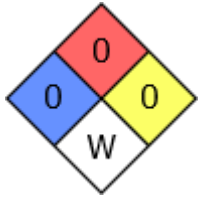
Chemical Safety Assessment

A chemical safety assessment is not required for this product.

HMIS Rating

Sustainabugs	
HEALTH	0
FLAMMABILITY	0
PHYSICAL HAZARD	0
PERSONAL PROTECTION	B

NFPA Rating



SECTION 16: OTHER INFORMATION

We support worldwide Responsible Care initiatives. We value the health and safety of our employees, customers, suppliers and neighbours, and the protection of the environment. Our commitment to Responsible Care is integral to conducting our business and operating our facilities in a safe and environmentally responsible fashion and minimising the impact of our operations on society and the environment during production, storage, transport, use and disposal of our products.

Further information/disclaimer

DISCLAIMER: The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigation to determine the suitability of information for their particular purposes. In no event shall RAD Custom Biological Solutions (Pty) Ltd be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, whatsoever arising, even if RAD Custom Biological Solutions has been advised of the possibility of such damages.

Preparation information

Amanda Colling – amandacolling@gmail.com