Sewage powder Information Sheet

Product name

SEWAGE POWDER (SP)

Biological solution for sewage, septic tanks and pit latrine systems

Product range

BACZYME Sustainable Technology

Product Classification

Sewage Powder is an **industrial wastewater treatment bio-augmentation additive** in powdered form, comprising **non-pathogenic environmental bacterial isolates** combined with **natural environmental isolates in food-grade activation nutrients** to support biological activity in nutrient-deficient environments. It is a **non-GMO micro-organism culture blend** and **non-carcinogenic, non-mutagenic bacterial preparation**, formulated as a **biological effluent treatment preparation** for heavy-duty organic solids digestion in septic, sewage, and effluent systems. Classified as a **bio-augmentation additive for effluent systems**, it delivers **organic solids reduction bio-culture** performance under concentrated waste conditions.

Description

A biodegradable and biologically active product that is used for the bio-augmentation of wastewater treatment systems and for environmental bioremediation. The consumer version (500g tub) is used for the biological treatment of grey water, septic tank and pit latrine systems. The super concentrate (+) versions are also used as biological ingredients in various cleaning and treatment products by re-formulators. The products improve waste treatment efficiency and operational robustness of the treatment processes.

Product Variants

This product comes in a ready-to-use version **(BACZYME SP)** and a super concentrate form **(BACZYME SP+)**. Both the RFU and + versions are available as liquids or powders to support a wide range of application requirements. The liquid versions are stabilised microbes in spore form and the powders are nutrient fortified to enhance biological activity.

Ready to use products

- 500g tub with scoop **(SP)**
- 25 L drum **(RFU LIQUID)**
- 1kg × 25 bags boxed **(RFU POWDER)**

Super Concentrate Products

- 25 L drum **(LIQUID)**
- 1kg × 25 bags boxed **(SEWAGE POWDER)**

Specifications:

SEWAGE RFU

Colour	Blue	Brown
Appearance	Liquid	Powder
Smell	Acidic	Natural
pH (Dissolution)	4.7 ± 0.1	6.0± 0.5
Cell concentration	1 x10^{8} CFU.ml^{-1}	1 x10^{8} CFU.ml^{-1}

SEWAGE RFU+

Colour	Blue	Brown
Appearance	Liquid	Powder
Smell	Acidic	Natural
pH (Dissolution)	4.7 ± 0.1	6.0± 0.5
Cell concentration	1 x10^{9} CFU.ml^{-1}	1 x10^{9} CFU.ml^{-1}

Bacterial Consortium

- *Bacillus cereus* strain B006
- *Bacillus cereus* strain D005

Safety

- ✓ Non-hazardous
- ✓ Non-carcinogenic, non-mutagenic bacterial preparation
- ✓ Non-GMO micro-organism culture blend
- ✓ Contains non-pathogenic environmental bacterial isolates

Key Features

- ✓ Ingredients Readily Biodegradable (OECD 301)
- ✓ Biologically active — contains active natural bacteria
- ✓ Compatible with and enhances water treatment and water re-use systems
- ✓ Packaging minimised, re-useable and recyclable
- ✓ Long lasting

Application

The bacteria in the product break down organic solids and control odour in wastewater treatment and environmental bioremediation applications.

Solids breakdown	✓
Treats COD	✓
Removes Phosphate	✓
Removes Nitrate	✓
Removes Nitrite	✓
Removes Ammonium	✓

Application — Powder Derivatives

The powder derivatives of this product incorporate activation nutrients which aid in growth of the bacteria under nutrient-deficient or nutrient-imbalanced conditions.

Ready to use product applications include:

- The biological treatment of sewage waste.
- The biological treatment of effluents generated by industry.
- Septic tank treatment.
- Grey-water system treatment.
- Waterless and portable toilets.
- Rehabilitation and biological treatment of pit latrine systems.

Concentrated Product Applications

- Incorporation as a biological ingredient in proprietary formulations by re-formulators.
- For heavily loaded systems as a seeding or booster treatment.

Ongoing Benefits of Correct Use

- Odour control.
- Bioremediation of waste materials.
- Reduces tendency for waste to leach to groundwater and cause contamination.
- Reduces unpleasant malodour.
- Reduces biological load in treated effluent, lowering environmental and public health risk.
- Reduced environmental pollution.
- With solids liquefied and digested there is lower requirement for sludge pump-out.
- Reduced conditions that support vector breeding.

Dosage

SEWAGE POWDER RFU (500g tub with scoop):

Add 1 scoop daily, directly into system or any convenient entry point of grey water or septic tank systems.

Add 1 scoop daily ideally mixed with 1L of water (where available) tc functional pit latrine system. Refer to our pit latrine treatment guideline (available on request).

SEWAGE LIQUID RFU:

Mix contents well. Use 1–5 L per one mega litre of wastewater per day. The product should ideally be dosed continuously by dosing system or, where not possible, manually but as frequently as feasible. Always maintain effective dosage into treatment system.

Powder:

For liquid wastes, add 1–5 kg per mega litre as per procedure for BAC SP RFU Liquid.

For bioremediation of solid waste add 1–5 kg per cubic metre. Disperse evenly across waste to be treated. In some cases, additives such as peat, sawdust or clay are used to improve dispersion.

Monitor and repeat dose monthly or as deemed necessary to complete the bioremediation process.

RFU+ Liquid and Powder (as formulation ingredient):

These products are included at 10% as an active biological formulation ingredient to produce a ready-to-use product. Always maintain effective dosage.

Usage Considerations

- Control pH ~ 7.00.
- Ensure that treatment system is properly mixed.
- Ensure system has sufficient retention time for the waste load to be treated.
- Ensure sufficient oxygen supply.
- In solids applications maintain moisture around 30%.
- Do not use non-biodegradable detergents.
- Do not use anti-bacterial or biocidal products, as these will inhibit biological treatment performance.

Designed to produce enzymes on demand

Active natural bacteria incorporated into the product produce waste-degrading enzymes:

Proteases	✓
Lipases	✓
Cellulases	✓
Amylases	✓
Urease	✓
Xylanase	✓

Stability

The product is stable for 2 years when stored between 4 and 40°C. Due to the use of natural colorants, colour changes may occur.