

SUMMIT BRIDGE LIMITED

Advanced Biological Water Treatment Solutions

TECHNICAL DATA SHEET

Summit Bio Clear



Drain line and soakaway bio-culture — powder biological effluent treatment preparation for FOG system and drain line maintenance

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PRODUCT DESCRIPTION

Summit Bio Clear is a biological effluent treatment preparation supplied by Summit Bridge Limited. It contains a specialised blend of non-pathogenic, non-GMO environmental bacterial isolates — including strains selected specifically for their lipase and protease activity — in a dry mineral carrier matrix with food-grade activation nutrients. Formulated for application to drain lines, grease traps, fat interceptors, and soakaway systems, Summit Bio Clear delivers approximately 1×10^8 CFU/g at point of manufacture. Pre-dissolved in warm water before use, it disperses through the drain line and adheres to grease deposits, extending contact time and improving FOG degradation performance.

Strain identity and safety confirmation. All strains are *Bacillus* species, identified by 16S rRNA sequence homology, with GRAS status, each confirmed negative for anthrax toxin and *Bacillus cereus* enterotoxin. Strains are produced under controlled monoseptic fermentation and supplied in spore form for shelf life, stability and robustness. Naturally occurring, non-GMO isolates; no animal-derived ingredients; food-grade components only.

KEY BENEFITS & PERFORMANCE CHARACTERISTICS

- Targeted FOG degradation — lipase-active strains selected for grease trap and drain environments
- Reduces drain line blockages and grease trap pump-out frequency
- Effective odour control in drain lines and FOG systems
- Dissolves readily in warm water for even distribution and extended contact time; germination typically within an hour, active growth within four
- Non-hazardous, non-pathogenic, non-GMO — safe for operators and the environment
- CLP/GHS: not classified as hazardous (Regulation (EC) No 1272/2008)
- Manufacturer stated operating range 10–80°C and pH 3.5–10; facultative through to fully anaerobic
- Spore-form consortium with a 24-month shelf life in cool, dry, sealed storage — no cold chain required
- Suitable for automated dosing pump integration and manual overnight application

GENERAL CHARACTERISTICS

Property	Value	Property	Value
Appearance	Light brown powder	Viable count (indicative)	$\sim 1 \times 10^8$ CFU/g at manufacture
Odour	Natural, mild acidic	Activation time	Germination typically within 1 hour of dosing; active growth within 4 hours (process-dependent)

Property	Value	Property	Value
pH (in dissolution)	7.0 ± 1.0	Temperature — manufacturer stated operating range	10–80°C; optimum 28°C
Bulk density	0.906 kg/L	Temperature — Summit Bridge recommended operating window	10–45°C; optimum 20–35°C
Solubility	Pre-dissolve in 10× warm water (30–40°C)	pH — manufacturer stated operating range	3.5–10; optimum 6.8
Max dissolution temperature	50°C — do not exceed	pH (in drain/system) — Summit Bridge recommended operating window	4.5–9.0; optimum 5.5–8.0
Flammability	Non-flammable (dust precautions apply)	Dissolved oxygen	Facultative through to fully anaerobic — spores survive anaerobic conditions without growing; aerobic or facultative conditions for active growth
Storage	Cool, dry, sealed — <15% RH	Shelf life	24 months from date of manufacture; use within 14 days of opening

Manufacturer stated operating ranges are the ranges within which the manufacturer reports the consortium remains viable and active across its applications. Summit Bridge recommended operating windows are the conditions under which Summit Bridge specifies and supports a dosing regime without site-specific confirmation. Applications outside the recommended window are confirmed per asset.

CHEMICAL DESCRIPTION & APPLICATION

Chemical description	Biological effluent treatment powder preparation containing non-pathogenic environmental bacterial isolates with food-grade activation nutrients in a mineral carrier matrix, optimised for fats, oils and grease (FOG) degradation.
Application	Bio-augmentation additive for drain line maintenance, grease trap management, FOG system treatment, and soakaway pit bio-remediation across hospitality, food & beverage, general industrial, and oil & gas sectors globally.
Indicative bacterial count	Approximately 1×10^8 CFU/g at point of manufacture (strain-dependent)
CLP / GHS classification	Not classified as hazardous under Regulation (EC) No 1272/2008
REACH status	All components registered or exempt under Regulation (EC) No 1907/2006

APPLICATION INSTRUCTIONS — DOSAGE RATES BY SECTOR

Dosage rates are indicative, derived from the manufacturer's written guidance and standard biological treatment practice. Actual rates must be confirmed by Summit Bridge Limited prior to client recommendation. **Preparation:** dissolve 1 part powder in 10 parts warm water (30–40°C) to make the standard working solution; dissolve at 1:5 for priming/shock applications. Doses below expressed in millilitres are volumes of prepared solution, not undiluted powder. The sewer/drain-line maintenance dose is applied as dry powder directly and is expressed in grams.

Sector / System	Application Point	Concentration	Start-up Dose	Maintenance Dose	Frequency
Hospitality — Restaurant	Kitchen drain (light FOG load)	25–50 ml prepared solution/drain/week	100 ml prepared solution/drain at commissioning	25–50 ml/week/drain	Weekly overnight; no flush for 6 hrs

Sector / System	Application Point	Concentration	Start-up Dose	Maintenance Dose	Frequency
Hospitality — Restaurant	Kitchen drain (heavy FOG load)	Up to 500 ml prepared solution/drain nightly	500 ml prepared solution/drain × 5 consecutive nights	100–250 ml prepared solution/drain nightly	Nightly after peak service
Hospitality — Hotel	Grease trap / fat interceptor (<1,000 L)	50–100 ml prepared solution/trap	200 ml prepared solution/trap (priming dose)	50–100 ml/week	Weekly at lowest flow (overnight)
Hospitality — Hotel	Grease trap / fat interceptor (1,000–5,000 L)	100–250 ml prepared solution/1,000 L	500 ml prepared solution/trap at commissioning	100–250 ml/1,000 L/wk	Weekly; bi-weekly in high-use periods
Food & Beverage	Grease trap (food processing)	100–200 ml prepared solution/1,000 L	250–500 ml prepared solution at commissioning	100–200 ml/1,000 L/wk	Weekly; monitor FOG levels monthly
General Industrial	Soakaway pit / infiltration system	50–100 ml prepared solution/m ³ /week	200 ml prepared solution/m ³ at commissioning	50–100 ml/m ³ /week	Weekly pour-down; allow natural percolation
General Industrial	Sewer / drain line (biofilm maintenance)	16–32 g dry powder/drain weekly	16 g/drain daily for 7 days (cleanout)	32 g/drain twice weekly	Twice weekly floor drains; weekly other lines — applied dry

Manufacturer's written guidance on the general regime: start-up at typically five times the maintenance rate, tuned down on measured performance to the maintenance floor. The commissioning and cleanout doses above are the drain-line expression of that regime.

Packaging	Storage	Transport
Available in 1 kg, 5 kg, 25 kg, and bulk bags. Container type: sealed moisture-barrier packaging. Custom packaging available for large-scale supply agreements — contact Summit Bridge Limited.	Store in a cool, dry, dark environment. Protect from moisture — moisture ingress permanently degrades product viability. Keep container sealed when not in use. Target storage: <15% relative humidity. Do not store alongside strong oxidising agents, chlorine-based disinfectants, or heavy-metal compounds. Shelf life: 24 months from date of manufacture under recommended conditions. Use within 14 days of opening.	Not classified as dangerous goods under ADR, RID, IMDG or IATA. No UN number assigned. No special precautions required. May be transported under standard commercial conditions by any mode. Marine pollutant: No.

SAFETY & REGULATORY COMPLIANCE

- Not classified as hazardous under CLP Regulation (EC) No 1272/2008
- REACH (EC) No 1907/2006: all components registered or exempt; no SVHC above threshold
- Biological agents (Directive 2000/54/EC): no hazard identified; organisms are non-pathogenic environmental isolates (non-GMO, BSL-1), confirmed negative for anthrax toxin and B. cereus enterotoxin
- Dust mask (FFP2 minimum) and safety goggles required during powder dispensing operations.
- For the full COSHH assessment refer to document SBG-COSHH-003 (current revision — being corrected to the powder form)

Operating notes and incompatibilities. Do not dissolve in water above 50°C — high temperature destroys bacterial viability. Allow 24 hours between chemical drain cleaners, caustic soda, bleach or detergent flush and biological treatment. Free chlorine at the dosing point should be below 0.3 mg/L; rinse the drain with clean water before dosing where residuals are higher. Allow 6 hours after dosing before flushing or jetting so the biofilm can establish. Store dry — moisture ingress permanently degrades viability. Systems operating above the Summit Bridge recommended window (45°C): the manufacturer's stated range extends to 80°C; confirm the application with Summit Bridge before dosing. Mechanically obstructed drains are cleared physically first; biological treatment then maintains the line.

Contact Summit Bridge Limited | Limassol, Cyprus | www.summitbridge-global.com

Classification Notice: This document is confidential and prepared exclusively for distribution by Summit Bridge Limited. All product descriptions comply with the Summit Bridge Terminology Guide (April 2026). Biological preparations are biological effluent treatment preparations containing non-pathogenic environmental bacterial isolates. For full safety data refer to SBG-COSHH-003. Summit Bridge Limited accepts no liability for misuse of this document or the products described herein.