

AULICK

A CITCO  WATER COMPANY



AulBac Biological Complex Line Technical Data Sheets

FOR WASTEWATER TREATMENT APPLICATIONS

Aulick - A CITCO Water Company
111 Patton Ct.
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AulickChemical.com

Technical Data Sheet

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COLD WATER TEMP ADAPTED CULTURES

AULBAC

Biological Complex

AulBac 400C

AulBac 400C is a powdered blend of naturally occurring, non-altered, patented psychrophilic microorganisms (cold water adapted) and growth stimulants formulated to efficiently degrade carbohydrates, proteins and fats, oils and grease (F.O.G.). The bacteria in AulBac 400C produce multiple types of enzymes such as Protease, Amylase, Esterase, Urease, Cellulase, Xylanase, and Lipase to break down waste products associated with meat processing, dairies, brewing and distilling operations, vegetable & fruit processing and carbohydrate processing facilities. AulBac 400C contains aerobic as well as facultative bacteria to work in anoxic conditions. Use of AulBac 400C will increase biological activity, improve biomass flocculation and enhance nitrogen and phosphorous removal at wastewater temperatures below 59°F (15°C). Do not use where high levels of toxic metals are present.



Directions: AulBac 400C may be added directly to aeration tank, lagoon, or oxidation ditch. For trickling filters, it's best to pre-hydrate product by adding 2 lbs. per 1.0 gallon of 20° - 30°C non-chlorinated water. Allow solution to stand for 30 – 60 minutes before adding to trickling filter.



Operating Conditions

- pH: 6.0 - 9.0
- Temp: 2° - 15°C
- PO₄: 2.0 mg/L minimum
- NH₃N: 2.0 mg/L minimum
- Specific gravity: 0.5 - 0.7
- Color: beige to light brown



Applications

- Food processing
- Beverage industry
- Rendering plants
- Breweries
- Fruit & vegetable proc.
- WWTPs



Availability

AulBac 400C is available in 25 lb. plastic pails and may be packaged in one-pound water-soluble packs. It's also available in 100 lb. fiber drums in bulk form.

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LOW TEMP AEROBIC BACTERIA



AulBac 500C

During low temperature periods many systems can lose COD, BOD, ammonia and TSS removal efficiency. Microbes in biological wastewater treatment systems are single-minded at growing and surviving using the contaminant found in wastewater as “food”. The growth rate of microbes affects the rate at which the chemicals are removed from the wastewater. As wastewater temperature increases or decreases beyond the optimal growth temperature range, microbes become less sensitive to the presence of the “food” and the net result is microbial growth rate decreases and the rate of biodegradation (COD/BOD removal) decreases. Bacteria that operate at lower temperatures than the mesophilic are termed Psychrophilic and can work in the 32° - 70°F (0° - 20°C) range.



Benefits: increase biomass activity during low wastewater temperature periods (< 15°C/59°F), enhance COD, TOC, BOD and TSS removal, rapid upset recovery, enhance biosolids settling/secondary clarifier settling.



Operating Conditions

- Temp. stressed conditions
- High salinity
- Low and high pH
- Recalcitrant materials
- Sulfide tolerant microbes



Applications

- WWTPs
- Activated sludge tanks
- Aeration basins
- Lagoons
- Anoxic Digesters
- Facultative Lagoons



Availability

AulBac 500C is available in 25 lb. pails. Contact Aulick Consultant for dosage rates.

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FATS, OILS, & GREASE



AulBac 900BC

AulBac 900BC contains a novel blend of microbes and micronutrients specifically formulated to breakdown and digest fats, greases, olefins, and vegetable oils suspended in wastewater. AulBac 900BC will work effectively in scum pits, lift stations, wet wells, flow equalization tanks, facultative lagoons/basins, and aeration basins. The microbes produce a prolific amount of diverse enzymes that penetrate and process insoluble oils and fats under stressful environmental conditions. AulBac 900BC works under both aerobic and anoxic conditions over a wide wastewater temperature and pH range. It does not contain caustics or acids and will not harm pipes or wastewater equipment.

Directions: AulBac 900BC may be applied to the wet well or lift station and various points within a collection system. Hang the AulBac 900BC unit where it partially meets the water line but is not completely submerged. **Caution:** Do not use where high levels of toxic metals such as zinc, chrome, or mercury are known to exist. *Persons allergic to dust should employ nose and mouth protection when handling this product. In the event of direct contact with the eyes or skin, flush area with water. Store product in a dry place between 21° - 27°C. Use immediately if wet. Do not freeze.



Operating Conditions

- pH: 4.40 - 10.0
- Temp: 5°C - 55°C (40°F - 130°F)
- PO₄: 2 mg/L Min.
- NH₃N: 2 mg/L Min.
- Viability: 4 billion CFU/g



Applications

- WWTPs
- Wet wells
- Lift stations
- Collection Systems
- Holding Tanks
- EQ Basins



Availability

AulBac 900BC is available in 2, 5, and 10 lb. blocks. A suspension net is included with each unit. Contact Aulick Consultant for dosage rates.

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LIQUID FATS, OILS, & GREASE

AULBAC

Biological Complex

AulBac 975L

Microbial Fat, Oil, & Grease Cleaner/Deodorizer

AulBac 975L removes and digests fat, oil, and grease in various wastewater environments under a broad wastewater temperature and pH range. It is best used in grease traps, scum pits, wet wells, equalization tanks, drain lines, and collection systems. AulBac 975L contains naturally occurring aerobic and facultative microbes specifically designed to digest grease, fat, fatty acids, vegetable oils, and sugars and starch (in addition to mitigating foul odors).

Directions: Mix container thoroughly prior to applying. AulBac 975L may be added upstream from the treatment area or directly to the grease trap, EQ basin, or aeration basin. Consult your Aulick technical representative for more specific application or dosing instructions. Do not use in environments where high levels of toxic metals such as zinc, chrome, or mercury are known to exist. **Caution:** in the event of direct contact with the eyes or skin, flush the affected area with water. Always refer to the Safety Data Sheet for additional safety information. **Storage:** dry place between 15° - 30°C. Do not freeze (shelf life = 1 year at 21°C (70°F)).



Operating Conditions

- pH: 4.25 - 10.0
- Temp: 5°C - 55°C (40°F - 130°F)
- Specific gravity: ~ 1.0
- Product: dormant bacterial cultures



Applications

- Grease traps
- Wet wells
- Lift stations
- Collection Systems
- Drain lines
- Equalization tanks



Availability

AulBac 975L is available in 5 gallon pails, 55 gallon drums, and 330 gallon totes.

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FILAMENTOUS & SLUDGE SETTLING



AulBac 1500

AulBac 1500 is a combination of natural components that disfavor the proliferation of various filamentous bacteria in biological wastewater treatment systems. AulBac 1500 has the ability to destabilize and manage excessive filamentous bacterial populations, thereby enhancing secondary biosolids settling while optimizing wastewater treatment plant operation. Nuisance foam generated by specific filament types may be reduced through the use of AulBac 1500. When properly applied, AulBac 1500 has been able to reduce the sludge yield in systems by 20-30%.

Directions: AulBac 1500 may be added directly to aeration tank, lagoon, or oxidation ditch. For trickling filters, it is best to pre-hydrate product by adding 2 lbs. per 1 gallon of 20-30°C non-chlorinated water. Allow solution to stand for 30 minutes to 1 hour before adding to trickling filter.

Do not use in environments where high levels of toxic metals such as zinc, chrome, or mercury are known to exist. Storage: store product in a dry place between 21°-27° C (70°-80.6°F). If product becomes wet, it must be used immediately. Do not freeze.



Operating Conditions

- pH: 6.0 - 9.0
- Temp: 15°C - 40°C
- PO₄: 2 mg/L Min.
- NH₃N: 2 mg/L Min.
- Viability: min 4 billion CFU/g



Applications

- Excessive foam generation management
- Improve biosolids settling
- Wastewater treatment plants



Availability

AulBac 1500 is available in 25 lb. plastic pails or 100 lb. fiber drums and may be packaged in one pound water soluble packs.

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AEROBIC DIGESTION START UP



AulBac 1600

AulBac 1600 is a blend of adapted facultative microorganisms formulated for industrial and municipal wastewater applications in which the dissolved oxygen is less than 1 mg/l, such as facultative/anoxic digesters and lagoons. The bacteria in AulBac 1600 produce multiple types of enzymes such as amylase, protease, esterase, urease, cellulase, xylanase, and lipase to break down proteins, animal and vegetable fats and oils, and carbohydrates. Use of AulBac 1600 will increase biological activity, increase supernatant clarity, reduce biosolids sludge yield, and produce a good settling biological floc.

Application: Primary applications include municipal and industrial wastewater treatment aerobic or facultative digesters.

Store AulBac 1600 in a dry place between 10°C - 40°C. If product becomes wet, it must be used immediately. Do not allow to freeze. Product may be added directly to mixing tank, digester, or lagoon. Do not use in environments where high levels of toxic metals such as zinc, chrome, or mercury are known to exist.



Operating Conditions

- pH: 5.5 - 8.5
- Temp: 15°C - 40°C (59°F - 104°F)
- PO₄: 2 mg/L minimum
- NH₃N: 2 mg/L minimum
- Viability: 4 billion CFU/g



Applications

- Municipal wastewater
- Industrial wastewater
- Facultative digesters
- Aerobic digesters



Availability

AulBac 1600 is available in 25 lb. plastic pails or 100 lb. fiber drums and may also be packaged in 1 lb. water soluble packs.

Technical Data Sheet

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AulBac 1600 Aerobic Digester

Benefits:

- rapid upset recovery and start-up
- improved settling
- enhanced supernatant clarity
- increase digestion rate

Technical Specs:

- Product; Dormant bacterial cultures and micronutrients
- Form; dry, free-flowing powder
- Color; beige to light brown



Technical Data Sheet

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H₂S & ODOR CONTROL



AulBac 1700

AulBac 1700 includes the broad blend of bacteria contained in AulBac A-300, in addition to sulfide/organic acid degrading cultures capable of reducing strong organic content and high COD/BOD wastewater. The microbial blend is capable of using sulfides, including hydrogen sulfide, as the energy source for their metabolism. In wastewater environments, AulBac 1700 converts sulfide compounds to elemental sulfur and degrades various organic acids. AulBac 1700 is applied to reduce toxicity and foaming caused by sulfides or for use in organic acid and mercaptan odor/corrosion reducing programs. AulBac 1700 will work in low pH and anoxic environments.

AulBac 1700 is also applied in tandem with **Nitra-Nox** for successful odor/corrosion control in collection system, primary clarifier, EQ basin, holding pond, digester, and thickener applications. In wastewater treatment plants that experience bio-solids settling concerns due to excessive filamentous growth associated with sulfides and organic acids, AulBac 1700 is applied as a non-chemical, proactive filamentous bacteria management program which neutralizes the conditions that promote the growth of specific filamentous species.



Operating Conditions

- pH; 5.5 - 10.0
- Temp; 15°C - 40°C (59°F - 104°F)
- PO₄; 2 mg/L minimum
- NH₃N; 2 mg/L minimum
- Viability; 4 billion CFU/g



Applications

- Pulp and paper mills
- Petroleum refining
- Chemical processing
- Collection Systems
- Municipal and industrial wastewater treatment



Availability

AulBac 1700 is available in 25 lb. plastic pails or 100 lb. fiber drums and may also be packaged in 1 lb. water soluble packs.

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AulBac 1700 Sulfur Degrading Microbial Blend

Directions: AulBac 1700 may be added directly to the aeration tank, lagoon, or an oxidation ditch. For trickling filters, it is best to pre-hydrate product by adding 1 lb. per 2.0 gallon of 20-30°C non-chlorinated water. Allow solution to stand for 30 minutes before adding to trickling filter. For all other applications contact your Aulick Technical Consultant for guidance.

Caution: Do not use in environments where high levels of toxic metals such as zinc, chrome, or mercury are known to exist. *Persons allergic to dust should employ nose and mouth protection when handling this product. In the event of direct contact with the eyes or skin, flush area with water.

Storage: store product in a dry place between 10 - 40°C. If product becomes wet, it must be used immediately. Do not freeze.



Benefits

- Reduce biomass inhibition
- Control foaming
- Improve bio-solids settling
- Control odors associated with hydrogen sulfide and organic acids



Benefits, con't.

- Increase COD and BOD removal efficiency
- Disfavor excessive growth of specific filamentous bacteria



Technical Specs

- Product; Dormant bacterial cultures and micronutrients
- Form; dry, free-flowing powder
- Color; beige to light brown

Technical Data Sheet

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ALGAE CONTROL



AulBac 1800

AulBac 1800 is a blend of proprietary microorganisms formulated for use where inordinate algae growth is a problem. The microbes in AulBac 1800 will breakdown excess wastes in ponds and lagoons and reduce excessive quantities of inorganic nutrients, such as biologically usable forms of phosphorus and nitrogen (which are causative reasons for excessive algal blooms). This leads to cleaner water, higher dissolved oxygen levels and where necessary, lower effluent Total Suspended Solids (TSS).

Directions: AulBac 1800 may be added directly to a pond, basin, or lagoon. Consult an Aulick representative for detailed Wastewater Treatment Plant dosing recommendations.

Do not use in environments where high levels of toxic metals such as zinc, chrome, or mercury are known to exist. Storage: store product in a dry place between 21°-27° C (70°-80.6°F). If product becomes wet, it must be used immediately. Do not freeze.



Operating Conditions

- pH: 5.0 - 10.0
- Temp: 5°C - 40°C (40°F - 104°F)
- Specific gravity: 0.5 - 0.7



Applications

- Pond clarification
- Lagoon clarification
- Algae management
- Municipal wastewater treatment



Availability

AulBac 1800 is available in 25 lb. plastic pails or 100 lb. fiber drums and may also be packaged in 1 lb. water soluble packs.

Technical Data Sheet

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AulBac 1800 Microbial Algae Management

Recommended Dosage Rate:

- Week 1 - 8 lbs/surface acre
- Week 2 - 6 lbs/surface acre
- Week 3 - 6 lbs/surface acre
- Week 4 - 4 lbs/surface acre
- Week 5 - 4 lbs/surface acre
- Week 6 - 2 lbs/surface acre
- Week 7 - 2 lbs/surface acre



Maintain the pond/lagoon/basin with 2 pounds/surface acre each month as needed for maintenance. For Wastewater Treatment System applications, a customized, site specific dosing schedule is highly suggested.



Caution: Persons allergic to dust should employ nose and mouth protection when handling this product. In the event of direct contact with the eyes or skin, flush area with water.



Benefits

- Reduce effluent TSS
- Decrease effluent pH variability
- Improve visual features



Technical Specs

- Product: dormant bacterial cultures and micronutrients
- Color: beige to light brown



Technical Specs, con't.

- Viability: min 4 billion CFU/g
- Form: dry, free flowing powder

Technical Data Sheet

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MICROBIAL SEPTIC TANK & CESSPOOL AID



AulBac 1950

AulBac 1950 is an all-natural, microbial and micronutrient blend specifically designed for cleaning and maintaining septic tanks, cesspools, and drain fields. The cultures in AulBac 1950 re-establish the liquefying and digesting capabilities of the system due to non-use, excessive loading (overloading) and the use of strong chemicals that contain anti-bacterial properties. Biomass optimization with AulBac 1950 will allow for effective treatment, thereby opening clogged sidewalls, collectors and distribution boxes, eliminating potential back-up issues and foul odors. AulBac 1950 is non-toxic and non-hazardous to plants, animals, and humans. It contains no harsh chemicals and is not corrosive. Regular use of AulBac 1950 allows the system to maintain peak efficiency helping to reduce system pumping and maintenance costs.



Directions: Initial treatment - use half pound of AulBac 1950 for each 500 gallons of septic tank capacity. This is recommended for typical domestic applications. For schools and restaurants, consult an Aulick representative. Repeat dosage in one week. **Maintenance treatment** - apply two ounces of AulBac 1950 per 500 gallons of tank capacity monthly. For high use applications, apply two ounces of AulBac 1950 per 500 gallons of tank capacity weekly. Mix AulBac 1950 with a gallon of warm water and flush down the toilet.



Specifications

- Dormant bacterial cultures
- Form: dry, free-flowing powder
- Specific gravity: 0.5 - 0.7
- Color: beige to brown
- Viability: 4 billion CFU/g



Applications

- Septic tanks/porto potties
- Sand mounds
- Cesspools & drain fields
- Campgrounds
- Mobile home parks
- Schools & Restaurants



Availability

AulBac 1950 is available in 25 lb. plastic pails or 100 lb. fiber drums and may be packaged in half-pound water-soluble packs. Contact an Aulick Consultant for dosage rates.

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AulBac 2100

Alkalinity & Micronutrient Blend

AulBac 2100 provides trace levels as all the necessary chelated minerals such as calcium, iron, zinc, cobalt, selenium, and manganese. In addition to the minerals, AulBac 2100 contains significant levels of available inorganic carbon which aids biosolids settling, nitrification (where applicable), and promotes vigorous cellular enzyme production, efficient COD and BOD removal, and rapid biomass growth.

Directions: AulBac 2100 may be added to the influent or directly to the aeration tank, lagoon, or oxidation ditch. For trickling filters, add to influent feed. AulBac 2100 does not require any special pre-hydration procedures. **Caution:** Persons allergic to dust should employ nose and mouth protection when handling this product. In the event of direct contact with the eyes or skin, flush the affected area with water.

Benefits: wastewater treatment plant optimization and performance, improve nitrification and TSS removal.



Operating Conditions

- pH; 4.25 - 10.0
- Temp; 5°C - 55°C (40°F - 130°F)
- Specific gravity; ~ 1.0
- Product; dormant bacterial cultures



Applications

- Aerobic, anoxic, and anaerobic wastewater treatment units



Availability

AulBac 2100 is available in 30 lb. plastic pails and 100 lb. fiber drums.

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AEROBIC BACTERIA



AulBac A-100

AulBac A-100 is a blend of adapted microorganisms and biostimulants formulated for use in municipal wastewater applications. The bacteria in AulBac A-100 produce multiple types of enzymes such as protease, amylase, esterase, xylanase, cellulase, and lipase. AulBac A-100 is designed to degrade BOD and F.O.G., in addition to the synthetic detergents and surfactants that are commonly found in municipal wastewater. AulBac A-100 contains aerobic as well as facultative bacteria to work in anoxic conditions.

Directions: AulBac A-100 may be added directly to the aeration tank, lagoon, or oxidation ditch. For trickling filters, it is best to prehydrate product by adding 2 lbs. per 1 gallon of 20-30°C non-chlorinated water. Allow solution to stand for 30 minutes to 1 hour before adding to trickling filter. Store in dry place between 21-27°C. Do not freeze. If product becomes wet, it must be used immediately. **Caution:** persons allergic to dust should employ nose and mouth protection when handling this product. Always refer to the Safety Data Sheet for additional safety information. Do not use in environments where high levels of toxic metals such as zinc, chrome, or mercury are known to exist.



Operating Conditions

- pH: 6.0 - 9.0
- Temp: 15°C - 40°C (59°F - 104°F)
- PO₄: 2 mg/L minimum
- Product: dormant bacterial cultures



Benefits

- Rapid upset recovery
- Enhanced wastewater treatment plant operation
- Enhanced effluent performance



Availability

AulBac A-100 is available in 25 lb. plastic pails or 100 lb. fiber drums and may be packaged in 1 lb. water soluble packs.

Technical Data Sheet

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CHEMICAL PROCESSING



AulBac A-300

AulBac A-300 contains a novel blend of bacteria and micronutrients specifically formulated to breakdown and digest fats, greases, olefins, and vegetable oils suspended in wastewater. AulBac A-300 works effectively in scum pits, lift stations, wet wells and flow equalization tanks, facultative lagoons/basins and aeration basins. The bacteria produce a prolific amount of diverse enzymes that penetrate and process insoluble oils and fats under stressful environmental conditions. AulBac A-300 works under both aerobic and anoxic conditions and does not contain caustics or acids and will not harm pipes or wastewater equipment.

Directions: AulBac A-300 may be added directly to an aeration tank, lagoon, or oxidation ditch. For trickling filters, it's best to pre-hydrate product by adding 2 lbs. per 1 gallon of 20-30°C non-chlorinated water. Allow solution to stand for 30 minutes to 1 hour before adding to trickling filter. Persons allergic to dust should employ nose and mouth protection when handling this product. In the event of direct contact with the eyes or skin, flush the affected area with water. Store product in a dry place between 21-27°C (70-80.6°F). If product becomes wet, it must be used immediately. Do not freeze or use in environments where high levels of toxic metals such as zinc, chrome, or mercury exist.



Operating Conditions

- pH: 4.5 - 10.0
- Temp: 5°C - 55°C (40°F - 130°F)
- PO₄: 2 mg/L Min.
- NH₃N: 2 mg/L Min.
- Viability: 4 billion CFU/g
- Specific gravity: 0.5 - 0.7



Applications

- F.O.G., BOD and TSS removal
- Wet wells
- Lift stations
- Collection systems
- Wastewater Treatment Plants



Availability

AulBac A-300 is available in 25 lb. plastic pails or 100 lb. fiber drums and may be packaged in 1-lb. and 0.5-lb. water-soluble packs. Contact Aulick Consultant for dosage rates.

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HIGH BOD/COD & SLUDGE SETTLING



AulBac A-400

AulBac A-400 is a blend of naturally occurring, non-altered microorganisms and growth stimulants formulated to efficiently degrade carbohydrates, proteins, and fats. The bacteria in AulBac A-400 produce multiple types of enzymes such as protease, amylase, esterase, urease, cellulase, xylanase, and lipase to break down waste products associated with meat processing, dairies, vegetable packing, fruit processing, and carbohydrate processing facilities. AulBac A-400 contains aerobic as well as facultative bacteria to work in anoxic conditions. Use of AulBac A-400 will increase biological activity, improve biomass flocculation, and enhance nitrogen and phosphorous removal.



Directions: AulBac A-400 may be added directly to an aeration tank, lagoon, or oxidation ditch. For trickling filters, it is best to prehydrate product by adding 2 lbs. per 1 gallon of 20-30°C non-chlorinated water. Allow solution to stand for 30 minutes to 1 hour before adding to trickling filter. Store product in a dry place between 21-27°C (70°F-80.6°F). If product becomes wet, it must be used immediately. Do not freeze or use in environments where high levels of toxic metals such as zinc, chrome, or mercury exist.



Operating Conditions

- pH: 6.0 - 9.0
- Temp: 15°C - 40°C (59°F - 104°F)
- PO₄: 2 mg/L Min.
- NH₃N: 2 mg/L Min.
- Viability: 4 billion CFU/g



Applications

- Food processing industry
- Rendering plants
- Breweries & beverage ind.
- Fruit/vegetable processing
- Municipal/industrial WWTPs



Availability

AulBac A-400 is available in 25 lb. pails or 100 lb. fiber drums. Contact Aulick Consultant for dosage rates.

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ANAEROBIC DIGESTION



AulBac ANA 200

AulBac ANA 200 is a specially formulated blend used to reduce foaming and improve sludge density and settling. It's effective in wastewater treatment systems that receive high levels of fats, oils, and greases. The bacteria in AulBac ANA 200 has a higher kinetic rate than most indigenous bacterial populations. The bacterium converts a higher percentage of the available BOD into energy.

Directions: Using AulBac ANA 200 regularly will increase the overall plant efficiency and reduce sludge production. For your protection, wear all proper safety devices as recommended in the Safety Data Sheet. Do not use where there are high levels of toxic metals such as zinc, chrome, and mercury.

AulBac ANA 200 may be added directly into lagoons, anaerobic tanks, or wastewater headworks. For filter, pre-hydrate product by adding 2 lbs. per gallon of 20-30°C non-chlorinated water. Let solution stand for one half hour up to two hours before adding to trickling filter.



Operating Conditions

- pH: 6.0 - 8.5
- Specific gravity: 0.5 - 8.5
- Appearance: dry, light brown powder



Applications

- Food processing industry
- Rendering plants
- Breweries & beverage ind.
- Fruit/vegetable processing
- Municipal/industrial WWTPs



Availability

AulBac ANA 200 is available in 25 lb. pails. Each 25 lb. pail contains 25-1 lb. bags for easy application.

Technical Data Sheet

MIDGE FLYS

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AulBac BTI

Aulbac BTI is a microbial composting product with midge fly and mosquito inhibiting cultures. Aulbac BTI contains bacillus thuringiensis, which destroy mosquito and fly larvae environments in which these pests can breed.

Directions: For Wastewater: Aulbac BTI should be pre-hydrated at a rate of 1 lbs. per gallon of 20-30°C water. The product should be applied at a rate of 1/2 lb per 50,000 gallons of flow per day. Initial treatment may require 1.5 lbs per 50,000 gallons of flow per day for 5 days. For Composting: Aulbac BTI should be pre-hydrated at a rate of 1 lbs. per gallon and sprayed over a composting pile at a rate of 1 gallon per 100 cubic yards. For fly and mosquito control, spray product directly to standing water, pits, and puddles. Use of 2 to 3 oz. for 100 square feet is sufficient.



Availability: Product is available in 25 lb. plastic pails or 100 lb. fiber drums. Product may be packaged in 1 lb. or 1/2-lb water-soluble packs for an additional charge. Store product in a dry place between 10°-40°C. If product becomes wet, it must be used immediately. Do not freeze. Do not use in environments where high levels of toxic metals such as zinc, chrome, or mercury are known to exist.



Operating Conditions

- pH: 6.0 - 8.5
- Temp: 15°C - 55°C
- PO₄: 2 mg/L Min.
- NH₃N: 2 mg/L Min.
- Specific gravity: 0.5 - 0.6



Specifications

- Product: dormant bacterial cultures and enzymes
- Form: dry, free-flowing water soluble powder
- Color: white to light brown



Applications

- Wastewater Treatment Plants
- Composting

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DRY F.O.G. CONTROL



AulBac DG

AulBac DG contains a novel blend of bacteria and micronutrients specifically formulated to breakdown and digest fats, greases, olefins, and vegetable oils suspended in wastewater. AulBac DG works effectively in scum pits, lift stations, wet wells, flow equalization tanks, facultative lagoons/basins and aeration basins. The bacteria produce a prolific amount of diverse enzymes that penetrate and process insoluble oils and fats under stressful environmental conditions. AulBac DG works under both aerobic and anoxic conditions and does not contain any caustics or acids and will not harm pipes or wastewater equipment.

Directions: AulBac DG may be added directly to aeration tanks, lagoons, or oxidation ditches. For trickling filters, it is best to pre-hydrate AulBac DG by adding 2 lb. per 1 gallon of 20°-30°C non-chlorinated water. Allow solution to stand for 30 minutes to 1 hour before adding to trickling filter. If AulBac DG becomes wet, it must be used immediately. Do not freeze. Persons allergic to dust should employ nose and mouth protection when handling this product. In the event of direct contact with the eyes or skin, flush the affected area with water. Do not use in environments where high levels of toxic metals such as zinc, chrome, and mercury are known to exist.



Operating Conditions

- pH: 4.5 - 10.0
- Temp: 5°C - 55°C (40°F - 130°F)
- PO₄: 2 mg/L Min.
- NH₃N: 2 mg/L Min.
- Viability: 4 billion CFU/g



Technical Specs

- Specific gravity: 0.5 - 0.7
- Product: dormant bacterial cultures and micronutrients
- Color: beige to light brown
- Storage: dry place between 21° - 27°C



Availability

AulBac DG is available in 25 lb. plastic pails or 100 lb. fiber drums and may be packaged in one-pound and half pound water-soluble packs.

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LIFT STATIONS & GREASE
CONTROL

AULBAC

Biological Complex

AulBac LS

AulBac LS is a specially designed enzymatic biological complex. It quickly digests grease in lift stations and grease traps, producing a by-product of carbon dioxide in the water. AulBac LS used regularly will remove and prevent grease build-up in lift stations and grease traps.

Directions: most dosage rates depend on grease concentration and the size of lift station or grease trap. See below for general recommendations. For your protection, wear safety attire when using AulBac LS. Refer to Safety Data Sheet for specific safety information. Do not use where there are high levels of toxic metals such as zinc, chrome, and mercury.

Grease Trap: using a dosage pump, apply AulBac LS at an average of one quart per day.

Lift Station: using a dosage pump, apply AulBac LS at an average of one gallon per day.



Operating Conditions

- pH: 6.0 - 8.0
- Odor: sweet
- Appearance: tallow liquid
- Freezing/melting point: 32°F
- Specific gravity: 8.12 PPG



Applications

- Municipal wastewater treatment
- Grease traps
- Lift stations
- Collection systems



Availability

AulBac LS is available in 5 gallon pails and 55 gallon drums.

Technical Data Sheet

aulickchemical.com

AMMONIA REMOVAL



AulBac Nitrifiers

AulBac Nitrifiers is a blend of nitrifying bacteria formulated to work in aerobic wastewater treatment plants that need to reduce or eliminate ammonia. AulBac Nitrifiers can be applied to all industrial wastewater plants such as chemical plants, petroleum refineries, steel mills, food processing plants, landfill leachate, and municipal wastewater treatment plants. **Benefits:** rapid upset recovery and plant start-up, maintaining permit compliance.

Directions: primary applications include food processing and municipal and industrial wastewater treatment.

Dilute AulBac Nitrifiers concentrate with 1 part concentrate to 5 parts of non-chlorinated water. The dilution water temperature should be between 20° - 35°C. Let stand between 45 minutes and 1 hour then apply directly to the aeration basin. Consult your Aulick representative for precise dosing and application information.

*Note: do not use in environments where high levels of toxic metals such as mercury, chromium, copper, zinc, etc. are known to exist.



Operating Conditions

- pH: 6.5 - 8.5
- Temp: 8°C - 40°C (46.4°F - 104°F)
- PO₄; 2 mg/L minimum
- NH₃N; 2 mg/L minimum
- Viability: ≥ 500 mg NH₃-N/kg/hr



Applications

- Landfills
- Steel mills
- Food processing
- Petroleum refineries
- Municipal and industrial wastewater treatment



Availability

AulBac Nitrifiers are available in 5 unit packs.

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