PureBiotics® (Probiotic) Products For Poultry Barns

The ABC's of creating & maintaining healthy microbial populations in poultry barns



B - Water Line Treatment (W+)

C-Misting (PEC)

A. Clean Barn with PureBiotics® Heavy Duty Cleaner (HDC)

- 1. Clean out bulky waste & old bedding material & hose down as you normally do.
- 2. Dilute the PureBiotic Cleaner with 95% water (for the first 3 cycles, then 97% afterwards). Temperature guide below note warmer water yields better results.
- 3. Foaming is highly recommended for the first 2-3 cycles to reduce biofilm buildup. Use a foaming attachment on the pressure washer to evenly distribute foam over the floor, walls, and equipment—including feeders and drinkers. Apply foam in sections of the barn foaming from bottom to top so areas are not missed.
- 4. Let foam sit for 15 minutes, then hose off that section with 'warm' clean water. Use a floor squeegee to remove standing water in areas that don't drain well.
- 5. After the first few cycles of foaming the product on to remove biofilm buildup from the floors and equipment, the PureBiotics® Cleaner can then be applied just using a pressure washer. This way the wash and rinse step will be done all at once.



An alternative to washing is to thoroughly air-hose-blow the barn out - then **fog** or **mist** the floor, walls, ceiling, feeders and drinkers, with **PureBiotic® Environmental Control (PEC)** or **(W+)** Note: Fogging without cleaning is *not* as effective at reducing pathogens and biofilm build up as also washing with PureBiotics® Cleaners, but is handy when in a hurry. NOTE: *This option is not recommended as a cleaning technique for the first three cycles when initially starting to use PureBiotics. But, once the barn environment appears to be under control after three cycles of PureBiotics® washing, then this option may be used as an alternative for washing the barn during cold or high humidity - weather conditions.*



For each 5,000 square feet of barn floor area, mix 1 quart (liter) of concentrate with 1 (or 2) liters/quarts of warm water to make a stock solution. This stock solution can them be fogged or misted into a *warm* (air temperature +10 C or warmer) barn using the overhead misters, a backpack sprayer, or an electric or gaspowered fogger.

- Shake the product before using Probiotic bacteria start to settle at bottom if undisturbed over days.
- **Use Water temperature** Between 25°C (77°F) and a maximum of 60°C (140°F). Do not let PureBiotics® products freeze, nor be exposed to direct sunlight for prolonged periods.
- Coverage- *One liter/quart of PureBiotic Cleaner will cover 100 m² (1,000 ft²). *One liter/quart of PureBiotic Mist when sprayed or misted will cover 5,000 square Feet.
- Foam and fog everything! Cover walls, water lines, drinkers, feeding trays, fans, doorways.
- Mix only what you need: Adding water to PureBiotics Concentrated products 'activates' the probiotics. So, only mix up product that you will use in several days as the 'activated' bacteria is strongest for 5 days after water is added to them (so they continue working for days after application).

PUREBIOTICS® CLEANERS & MIST Are Safe for Everyone – There are no harsh chemicals. The Cleaner only contains surfactants, enzymes, water and stabilized probiotic bacteria. The MIST only contains probiotic bacteria and water.

If disinfectant products must be used – Use them *prior* to PureBiotics use, and then allow areas treated to dry thoroughly BEFORE PureBiotic products are used. Once a disinfectant fully dries it becomes inert and will not harm the beneficial PureBiotic (StaBiotic/Probiotic) organisms.





Using PureBiotics® Probiotics in Poultry Barns

The ABC's of creating & maintaining healthy microbial populations in poultry barns

A - Cleaning (HDC

B-Water Line Treatment (W+)

<u>C</u>-Misting (W+)

B - Clean Water Lines with HDC & Then Treat Water Lines with Water PLUS (W+)

- 1. **Preliminary Cleaning** For <u>first time use</u> with PureBiotics and with the <u>barn empty</u>. Add **HDC** concentrate through the 1:128 medicator until the water line system is full. Leave overnight, then flush <u>"very well"</u> with fresh water. Repeat as necessary to remove ALL dirt and biofilm. **Do** not allow animals to drink the water that still contains organic matter that is loosened in this step. Flush the lines very, very thoroughly first.!
- 2. **Regular Treatment-** Dilute **Water Plus** with water according to the table below to make up the stock solution then use a 1:128 medicator to add the stock solution into the water lines. Precharge the water lines with a 1:1000 solution the day before the chicks arrive.
- 3. Dilution rates: Week 1 = 1:1000 Weeks 2 and onward = 1:10,000

Stock Dilution Table

Calculating Water Plus Dilution with a 128:1 Medicator			
Final Dilution- Metric Units			
		1:1000	1:10,000
	1 liter/Qtr.	128 ml	13 ml
	2 liters/Qtr.	256 ml	26 ml
Amount of Stock	4 liters/Qtr.	512 ml	51 ml
Water Required	5 liters/Qtr.	640 ml	64 ml
	10 liters/Qtr.	1280 ml	128 ml
	20 liters/Qtr.	2560 ml	256 ml
Final Dilution- US Units			
	1 US Gal	16.4 oz.	1.6 oz.
Amount of Stock	2 US Gal	32.8 oz.	3.3 oz.
Water Required	4 US Gal	65.5 oz.	6.6 oz.
	5 US Gal	81.9 oz.	8.2 oz.



- Shake the product before using—Probiotic bacteria tend to settle if undisturbed for several days.
- Water temperature 10°C (50°F) to 50°C (120°F) maximum. Cool water is OK. Do not freeze.
- **Monitoring pH:** The pH of the water should be kept in a range of pH 5.0 to pH 9.0; excessive acidity or alkalinity can hinder the action of the PureBiotic bacteria.
- Chlorine levels: 2 ppm. is acceptable. Levels higher than 4 ppm will kill the probiotic bacteria.
- **Mix only what you need-** Only mix up stock for a day or two, as the bacteria expire in 5 days after being activated by adding water.
- If disinfectants products must be used— Use prior to PureBiotics application, and the water lines must be flushed with clean water **BEFORE** PureBiotics[®] products are used.





<u>Using PureBiotics® Probiotics in Poultry Barns</u>

The ABC's of creating & maintaining healthy microbial populations in poultry barns

<u>A</u> - Cleaning (HDC <u>B</u> - Water Line Treatment (W+)

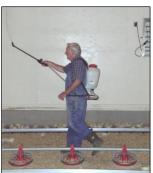
C - Misting

C. Mist Barn or Animal Housing with PUREBIOTIC® MIST

- Use a backpack sprayer, fogger or misting system that will evenly distribute a fine mist of PUREBIOTIC[®] MIST over all the bedding and barn areas. Contact us for more information if you are using overhead misters.
- 2. Dilute the PureBiotic[®] Mist (PEC) or our **W+** with water. One liter/quart of **W+** will provide enough probiotics to well cover 750 m² (8,000 ft²). Only add enough water to extend the **W+** volume so that the product can be evenly distributed over the bedding and all surfaces (eg: 1 Liter/Quart of W+ is mixed with 1 to 2 L of water to mist up to a 900 m² (10,000 ft²⁾ barn. Water amount may be adjusted for variables such as sprayer type, time of year, and barn size as this may affect the amount of water needed to allow coverage.



- 4. The application schedule is:
 - Day 0 (Spray the day before the chicks arrive),
 - Days 1-4, 7, 10, 13, 16, 19, 22, 26, 30.



- **Shake the product before using** Probiotic bacteria settle out if undisturbed for several days.
- Water temperature should be between 10°C (50°F) and 50°C (120°F).
- Coverage- Use One liter/quart of **W+ Concentrate** per 750 m² (8000 ft²). Add only enough dilution water to allow you to spread' the **W+** over the bedding & all areas. Apply in a very light "Fine" mist so as to not wet surfaces. A battery-powered backpack takes less work.
- Storage Do not let PureBiotics® products freeze or be exposed to direct sunlight for long periods.
- Mix only what you need Add water to the W+ Concentrate in a separate container to 'activate' the dormant probiotic bacteria. Only mix up enough product for 3 or less days, as the 'activated' bacteria is strongest for 5 days after water is added to them.
- PureBiotic Mist (PEC) & W+ Concentrate is safe for everyone They contains only purified water and proprietary stabilized probiotic bacteria. Gloves and masks are not needed.
- If disinfectant products must be used— Use them *prior* to PureBiotics® use, and allow treated areas to dry thoroughly BEFORE PureBiotics® products are used. Once the disinfectant dries it should be inert and should not harm the PureBiotics® Probiotics.
- Also spray your hands for better hygiene An undiluted spray bottle of Mist (PEC) or W+ should be kept at the doorways to be used prior to entering/exiting the barn. Use sparingly, as a little goes a long way and the PureBiotics keep working for a long time..!

Questions? Send an email to Info@MyPureBiotics.com or call 407-730-7915.