PoultryStar® Hatchery

Healthy gut – strong bird!



PoultryStar® Hatchery is a well-defined, poultry-specific, multi-genus synbiotic product that promotes beneficial gut microbiota through the combined action of specially selected probiotic microorganisms and prebiotic fructooligosaccharides.

PoultryStar® Hatchery is designed to improve gut health of poultry and to make day-old chicks less susceptible to be colonised by pathogens leading to improved livability and performance parameters within the first week.

Mode of action

- **Our patented probiotic strains** were thoroughly investigated and selected due to their superior probiotic features and synergistic effects. They demonstrated the best efficacy in the competitive exclusion of pathogenic bacteria. The probiotic strains were isolated out of the gut of healthy birds to increase the probiotic-host compatibility.
- **Prebiotic fructooligosaccharides (FOS)** serve as a nutritional source specific for beneficial bacteria from the genera Lactobacillus and Bifidobacterium.

Main benefits

- Fast establishment of beneficial gut microbiota
- Re-establishment of balanced gut microbiota post-antibiotic application
- Reduction of enteric opportunistic and pathogenic bacteria
- Reduction of mortality and morbidity rates
- No negative side effects, no withdrawal period

Application

PoultryStar® Hatchery is mixed with cool water (≤25°C) to create a liquid gel that is applied to day-old chicks using a hatchery gel applicator.

Target species and categories: chickens for fattening, chickens reared for laying, minor poultry species other than laying.

- Administration is intended for day-old chicks at hatchery
- One time application inclusion rate: 100 g per 10,000 day-old chicks
- PoultryStar® strains are stable in gel preparation preparation for up to 24 hours
- For optimal stability and performance, prepare the gel no more than 6 hours before application.

Water and Equipment Requirements

- Use a clean mixing vessel with a minimum capacity of 5 L
- Use room-temperature or cold water (≤25°C)
- Water should contain a maximum of 5 ppm chlorine
- Demineralized or UV-treated water may also be used
- For best mixing performance, add the powder to the water, not vice versa

Note: Lower water temperatures increase gel viscosity. Use the recommended temperature range to ensure proper consistency.



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Mixing Procedure

1. Add the required amount of fwresh, clean water to the mixing vessel
2. Slowly add the required quantity of PoultryStar® while stirring continuously
3. Mix using an industrial kitchen-grade handheld blender (recommended speed: approximately 9,000 rpm)
4. Continue stirring until the product is completely dispersed

Important: Keep the blender blades below the liquid surface during mixing to avoid incorporating air into the gel.

Note: Excessive air incorporation can result in foam formation. If excessive foam develops, allow the mixture to stand for approximately 1 hour or pass it through a sieve before use.

Preparation of the Gel Solution

Refer to the dosing table below to calculate the required amount of product for different flock sizes.

Calculation table for stock solution:

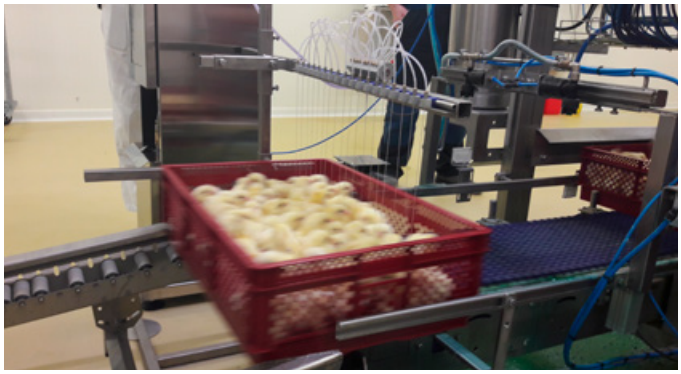
No. of birds	Needed amount of PoultryStar® Hatchery		Needed amount of water for preparation of stock solution per application day (amount of water based on 27 mls application)
	Grams (heaped tablespoons)		Liter
10 000	100 g	(7 1/2 tbsp)	2.7
20 000	200 g	(15 tbsp)	5.4
30 000	300 g	(22 1/2 tbsp)	8.1
40 000	400 g	(30 tbsp)	10.8
50 000	500 g	(37 1/2 tbsp)	13.5
60 000	600 g	(45 tbsp)	16,2
70 000	700 g	(52 1/2 tbsp)	18,9
80 000	800 g	(1 bag)	21,6

Before Application

- Allow the gel mixture to rest for at least 30 minutes after preparation to achieve optimal consistency
- Ensure the powder is fully dissolved and evenly distributed
- Pass the gel through a fine sieve to remove any lumps that could block the applicator nozzles

Loading the Applicator

1. Fill the applicator holding tank with the prepared gel
2. Close or cover the tank opening
3. Prime the applicator piping by manually activating the mechanical sensor
4. Adjust the applicator piston to deliver 27 mL of gel per basket of 100 day-old chicks.
5. Start application



Storage (Optional)

If temporary storage is required:

- Store the prepared gel under refrigeration
- Before use, allow the gel to return to room temperature
- Briefly stir the mixture before loading into the applicator

Recommendation: Prepare a fresh gel solution daily whenever possible.

Vaccine Compatibility

- Co-application with vaccines does not negatively affect the probiotic strains in PoultryStar®
- When applying water-based spray vaccines simultaneously, administer the vaccine first and PoultryStar® second
- If a vaccine requires dilution, ensure it is fully dissolved before adding PoultryStar®

Do not co-apply with live or inactivated bacterial vaccines targeting the gastrointestinal tract, including Salmonella and E. coli vaccines.

PoultryStar® is compatible with inactivated vaccines administered around the vaccination period. Also compatible with coccidiosis vaccines.

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