Salmonella Protection.

as easy as one, two, three with GALLIVAC Se.



Salmonella laccination as easy as one, two, three

Electronmicrographs of Salmonella enteritidis courtesy of Professor Grund, Free University of Berlin.

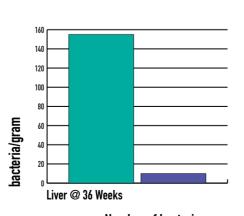
EASY TO MAKE THE RIGHT CHOICE. With the importance of Salmonella control ever increasing, choosing the right vaccine for your needs can be the most important decision that you will make for your flock. Achieving the protection that you need with the time and resources that you have available is not always easy. With GALLIVAC® Se, <u>Salmonella enteritidis</u> vaccination can be as easy as **one**, two, three

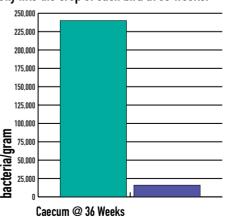
PROVEN RELIABILITY. With several years of proven results in Europe, GALLIVAC® Se has established a reputation for reliability and safety. Developed by IDT in Germany, a vaccine laboratory with world renowned expertise in Salmonella control, GALLIVAC® Se is a highly immunogenic homologous live <u>Salmonella enteritidis</u> vaccine developed to meet your needs.

EASY TWO DOSE REGIMEN. Licenced for use with a two dose regimen•, GALLIVAC® Se reduces the time and labour that you need to devote to vaccine administration as well as freeing up space in your already demanding vaccination schedule. Active immunity developes rapidly (6 days after vaccination) and is prolonged, thus protecting your birds through the highest risk periods of onset of lay and peak lay.

SOLID RELIABLE PROTECTION. Early in its' development, GALLIVAC® Se showed its' ability to protect against <u>Salmonella enteritidis</u> in the face of severe experimental challenge that far exceeds the level of challenge encountered on a farm.

Oral Vaccination with Gallivac® Se at one day and at fifteen days of age, and challenged with 5 billion pathogenic Salmonella enteritidis bacteria directly into the crop of each bird at 36 weeks.





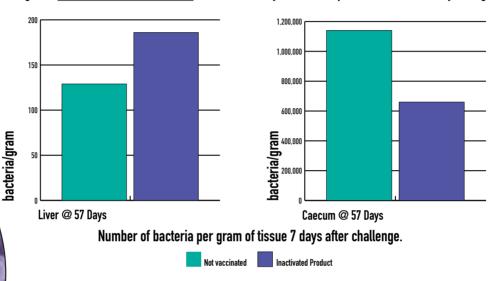
Number of bacteria per gram of tissue 7 days after challenge.

Not vaccinated Gallivac S

^{*}For full details of the recommended vaccination schedule, see reverse.

GALLIVAC® Se

Inactivated Vaccine at one day and at twenty-nine days of age, and challenged with 5 billion pathogenic Salmonella enteritidis bacteria directly into the crop of each bird at 50 days of age.



COMPLETE IMMUNE RESPONSE.

The benefits of live <u>Salmonella enteritidis</u> vaccines are well documented, the vaccine strain effectively 'mimicking' the natural course of <u>Salmonella enteritidis</u> infection and resulting in a series of immune and non-immune effects:

The 'Inhibitory Phenomenon' provides broad rapid protection in the gut by the vaccine strain effectively excluding salmonella field challenge.*

Photo above: Electronmicrograph of <u>Salmonella Enteritidis</u> attached to the gut lining.

Local Antibody production occurs throughout the gut, even in the crop, as a result of local stimulation.*

Cell Mediated Immunity develops as a natural response to the live vaccine in the bird. The appropriate cell mediated immunity can only be achieved by using a homologous strain vaccine. (S.e.) *

Humoral or Circulating Antibody is also produced, however the induction of circulating antibodies is insufficient alone for effective protection – it is essential that the appropriate cellular immune mechanisms are also activated.*



^{*} References on file.

Salmonella Protection as easy as one, two, three

Photo courtesy of Plasson Poultry Drinkers.

PLASSON

UNAFFECTED BY MAB.

Unlike other vaccines, GALLIVAC® Se is unaffected by maternally derived antibodies (which the day old chick can acquire from its parent) against <u>Salmonella enteritidis</u> and can therefore be administered from one day of age ensuring the earliest possible protection.

EASY TO ADD TO DRINKING WATER.

GALLIVAC® Se is a reliable, labour saving solution with no need to handle the birds. GALLIVAC® Se administration is quick and easy through the drinker system and offers full protection 6 days after the first dose. In common with all other vaccines

system and offers full protection 6 days after the first dose. In common with all other vaccines that are administered via the drinking water, it is essential to pay attention to the method of administration and ensure that each bird receives the vaccine.

EXPERT ADVICE.

Merial has a well established reputation for their vaccination services both in Europe and around in the world. Specialised vaccination service staff can offer professional advice and assistance.

Merial has exceptional
experience with vaccine
administration as well
as having a range of
devices available to
improve vaccine
administration
specifically developed
by the Merial global
vaccination service team.



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GALLIVAC® Se Key points:

- Registered as two-dose regimen.
- Licenced for drinking water administration.
- Homologous strain <u>Salmonella enteritidis</u> vaccine stimulating the most appropriate immune response.
- Stimulates comprehensive active and passive immune response; 'inhibition phenomenon', local, cell mediated and humoral/circulating immunity.
- Onset of active immunity 6 days post the first vaccination.
- No interference by maternally derived antibody to S.e.
- Double attenuated, genetically stable & avirulent.
- Easily distinguishable from field strains by means of a rapid, specific diagnostic test.
- \forall No cross reacting antibodies to the <u>S. gallinarum</u> test are generated.



Insert local legal text here.

Welcome to the

$\begin{array}{c} \text{new dawn of } \textbf{live salmonella} \ \text{vaccination,} \\ \textbf{GALLIVAC}^{\text{R}} \textbf{Se.} \end{array}$



Merial Avian Global Enterprise Insert local contact information here Tel. 00.000.000.0000 . Fax 00.000.000.0000

Merial is the world's leading innovation driven animal health company,
providing a comprehensive range of pharmaceuticals and vaccines to enhance the health,
well-being and performance of a wide range of animal species. Merial operates in more than 150 countries worldwide. Its 2001 sales were in excess of \$1.6 bn / 1.7bn euros.