

# Vaxsafe<sup>®</sup> MG304

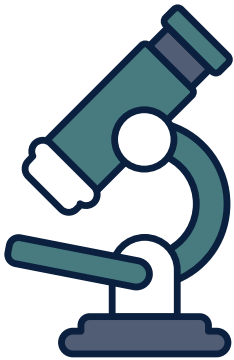


**BIOPROPERTIES**

The Vaccine Innovators

Safe and effective live vaccine solutions

# Safe and Effective Mycoplasma gallisepticum control



## Product development

Vaxsafe® MG304 represents the next generation in *Mycoplasma gallisepticum* (MG) vaccine development. Researchers at the University of Melbourne isolated a clone of the live attenuated Vaxsafe® ts-11 vaccine expressing the gapA surface adhesin protein, which they designated as Strain MG304 (ts-304). Further studies confirmed that MG304 retains the temperature-sensitive attenuation properties of ts-11 and it has excellent colonisation properties. The freeze-dried format of Vaxsafe® MG304 enables more convenient on-farm storage at -18°C.

Enhanced colonisation of the upper respiratory tract

Freeze-dried for convenient storage at -18°C

Safe and effective for life-long protection

Mix with Vaxsafe® MS and co-administer both vaccines with one eye drop

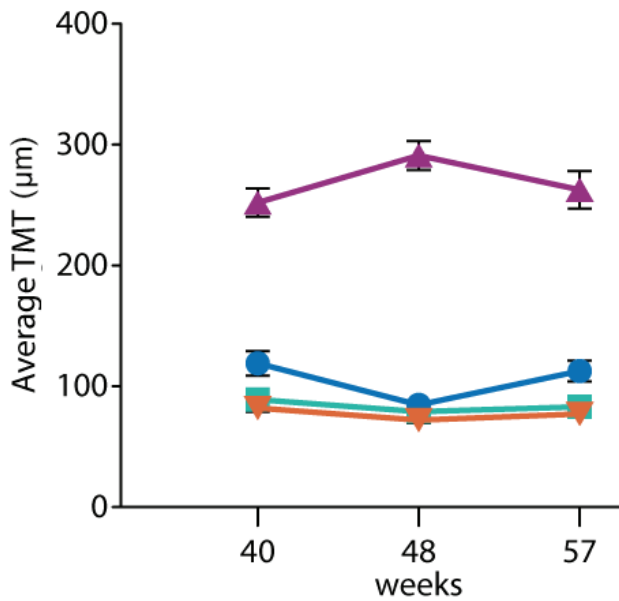
## Safety

Vaxsafe® MG304 vaccine has been extensively evaluated in Specific Pathogen-Free (SPF) chickens and shown to be safe with no clinical effect detected across all the studies conducted.

Field trials conducted in commercial broiler breeder and layer flocks further confirmed its safety, with no adverse reactions to the vaccine nor any detrimental effects on flock health or productivity including when co-administered with other vaccines.

Studies have shown there were no instances of transmission via the egg or bird to bird, nor any reversion to virulence following inoculation of passaged vaccine.





Tracheal Mucosal Thickness (TMT)  
- measure of respiratory disease

- vaccinated and challenged
- ▲ challenged only
- vaccinated only
- ▼ unvaccinated and unchallenged

## Efficacy

In comprehensive studies, Vaxsafe® MG304 demonstrated protection against *Mycoplasma gallisepticum* (MG) induced respiratory disease and other Mycoplasma symptoms. By comparing vaccinated birds to non-vaccinated controls after challenge, significant levels of protection were evident.

In a challenge model involving the aerosol delivery of a field strain of MG, birds vaccinated with Vaxsafe® MG304 were consistently protected against this challenge evidenced by reductions in respiratory disease.

Vaxsafe® MG304 establishes colonization in the upper respiratory tract from the time of vaccination and persists in the upper respiratory tract throughout the bird's life. Studies have shown that protection against challenge with virulent MG persists to at least 60 weeks of age (57 weeks post-vaccination) and there was no difference in the level of protection at 57 weeks of age from 40 weeks of age indicating whole of life protection.

## Vaccine Administration

A full description on the method of storage, handling and administration of Vaxsafe® MG 304 is provided in the product leaflet that accompanies the vaccine.

Detailed instructions for the preparation and administration of Vaxsafe® MG304 using Vaxsafe® MS as diluent can be found on the last page of this product brochure and will be available on our website.



### Registered Office/Distribution

36 Charter Street, Ringwood  
VIC 3134 AUSTRALIA

T +61 (3) 9871 2000  
F +61 3 9876 0556

[www.bioproperties.com.au](http://www.bioproperties.com.au)

### Manufacturing Division

11-15 Moores Road, Glenorie  
NSW 2157 AUSTRALIA

T +61 (2) 9658 3300  
F +61 2 9652 0914



# Preparation Instructions

## for co-administering Vaxsafe® MG304 with Vaxsafe® MS as diluent

Bioproperties are currently conducting ongoing trials to develop new safety and efficacy claims for alternative age and routes of administration.



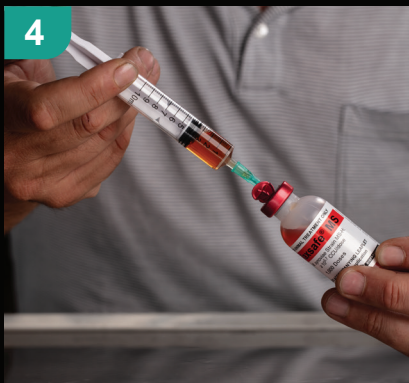
- Remove the required number of both vaccines from their frozen storage.
- Set aside the Vaxsafe® MG304 vials.
- Thaw the unopened Vaxsafe® MS dropper bottles in at least 10 litres of water heated between 32-35°C.



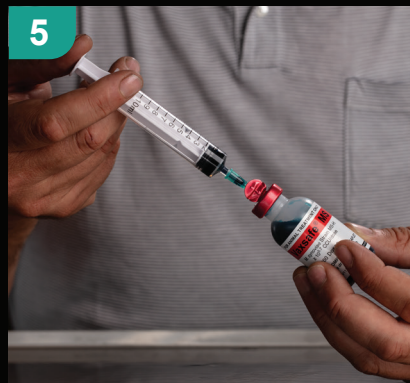
- Once the Vaxsafe® MS vaccine is completely thawed, using a clean needle and syringe, withdraw around 3mL of thawed Vaxsafe® MS from the dropper bottle.



- Remove the central part of the Vaxsafe® MG304 vial crimp to expose the vial stopper.
- Rehydrate the freeze-dried pellet of the MG304 vaccine by gently injecting the contents of the syringe through the vial stopper.
- Gently swirl to mix the reconstituted freeze-dried pellet.



- Transfer the reconstituted vaccine back into the thawed Vaxsafe® MS dropper bottle, ensuring that all vaccine is removed from the vial.



- Add approximately 1% (0.3mL) of Bioproperties Blue Dye if required for visualising application and tongue staining for post vaccination uptake assessment.
- Tongue staining should be assessed between 20 seconds and 20 minutes after vaccination.



- Attach an eye dropper tip to the plastic dropper bottle.
- Use the prepared vaccine within 4 hours if kept in a chilled container or within 2 hours if held at ambient temperature. Do NOT refreeze.
- Administer one eye drop to each bird to co-administer both vaccines.