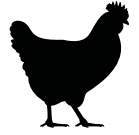


# MEFLUVAC™

## H9+ND IMMUBOOST

TRANSBOUNDARY  
CONTROL



Inactivated trivalent vaccine against LPAI (subtypes H9N2) and Newcastle Disease (GII and GVII) virus

### INTRODUCTION

Low pathogenic avian influenza (LPAI) is a contagious, multi-organ systemic disease of poultry leading to high morbidity in poultry<sup>1</sup>. The disease is caused by some H9 subtypes of type A influenza virus, family *Orthomyxoviridae*.<sup>1</sup> After mutation these LPAI viruses can become HPAI viruses, usually while they are circulating in poultry flocks.<sup>2</sup>

Avian influenza virus can spread in the farm by both the fecal–oral route and aerosols, due to the proximity of the birds, fomites can be important in transmission and flies may act as mechanical vectors.<sup>2</sup>

Vaccination became the primary control measure used to minimize losses.<sup>3</sup>

On the other hand, the Newcastle Disease Virus (NDV) genotypes I and II primarily represent vaccine strains, while the more virulent NDVs are clustered within genotypes III to X. Intriguingly since the 1990s, genotype VIII expanded across Asia, South Africa, and parts of Europe; while genotype VII has been frequently reported in Europe, China, the Middle East, and South Africa.<sup>4,5,6,7</sup>

### COMPOSITION (before inactivation)

- Inactivated Low Pathogenic Avian Influenza H9N2 subtype, G1-lineage, [A/Chicken/Egypt/FAO-S33/2021]  $\geq 8.5 \log_{10} \text{EID}_{50}/\text{dose}$ .
- Inactivated Newcastle Disease Virus, Genotype II LaSota [ME/NDV3]  $\geq 8.5 \log_{10} \text{EID}_{50}/\text{dose}$ .
- Inactivated recombinant Newcastle Disease Virus, Genotype VII [rg NDV1/ME.G7/2017]  $\geq 8.5 \log_{10} \text{EID}_{50}/\text{dose}$ .

### TARGET SPECIES

Chickens.

### INDICATIONS

For early immunization of chickens against Low Pathogenic Avian Influenza H9N2 subtype and Newcastle Disease.

### VACCINATION PROGRAM

Birds can be vaccinated from the first day of age onwards, as per advice from your poultry veterinarian.

### WITHDRAWAL

Zero days.

### IMMUNITY

- Onset of immunity: 3 weeks after the first vaccination.
- Duration of immunity: conditioned to the vaccination scheme established for the local epidemiological situation.

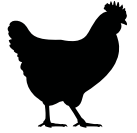
### CONSIDERATIONS

- For optimal booster effects, the birds should be primed with live NDV vaccines.
- Do not administer less than the recommended dosage.
- Allow the vaccine to reach room temperature (20-25°C) before use.
- The vaccine may occasionally separate into two layers on storage. This in no way affects its potency, but the vaccine should be shaken vigorously before and during use to ensure good emulsification.

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### PRESENTATION

MEFLUVAC™ H9+ND IMMUBOOST is packed and presented in 500 mL (2500 doses) polyethylene terephthalate (PET) bottles.

For further information please contact us:

[kemin.biologics@kemin.com](mailto:kemin.biologics@kemin.com)

or visit:

[kemin.com/eu/en/markets/vaccines](http://kemin.com/eu/en/markets/vaccines)



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PTP-12508

### DOSAGE

The vaccine dose (0.2 mL/bird) should be administered subcutaneously in the lower part of the neck or intramuscularly in the thigh or breast muscles.

### ADMINISTRATION

Before use, the vaccine should be shaken well to ensure proper mixing. Sterile injection equipment should be used to avoid contamination. Do not use MEFLUVAC™ H9+ND IMMUBOOST if you notice critical irreversible separation of the emulsion.

- Subcutaneous injection: in the lower part of the neck. The needle should be inserted just under the skin in a direction away from the head and in a straight line with the neck.
- Intramuscular injection: in the breast muscles by inserting the needle with a 45° angle to avoid intraperitoneal injection.

### STORAGE PRECAUTIONS

- Store and transport refrigerated (+2°C to +8°C).
- Do not freeze.
- Store in a dry place protected from direct sunlight.
- Do not use this product after the expiry date.
- Shelf life after first opening the bottle: 3 hours.

### References

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7. Liu H, Wang Z, Wu Y, Zheng D, Sun C, Bi D, Zuo Y, Xu T. Molecular epidemiological analysis of Newcastle disease virus isolated in China in 2005. *J Virol Methods*. 2007;140:206-211.