#### **AVI ND HB1+IB**

Live, freeze-dried vaccine, Hitchner B1 and Massachusetts B48 strains, for the active immunization of chickens against Newcastle Disease and Infectious Bronchitis

#### Composition

AVI ND HB1+IB live vaccine contains the Hitchner B1 strain of Newcastle Disease virus and the Massachusetts B48 strain of Infectious Bronchitis virus in live, freeze-dried form. The embryonated hen eggs used in the production of the vaccine are obtained from specified-pathogen-free (SPF) flocks.

#### Indication

For the active immunization of healthy chickens against Infectious Bronchitis and Newcastle Disease. The vaccine may be used for initial or re-vaccination of broilers, pullets and hens.

## **Dosage & Administration**

Primary vaccination should be carried out with AVI ND HB1+IB byeye-drop, as from 4 days of age. Booster vaccination is recommended 3 to 4 weeks later by spray or drinking water. For pullets, a second booster vaccination is recommended at 10 to 12 weeks of age.

### Eye-drop method

The freeze-dried vaccine is reconstituted in sterile distilled water at a ratio of 1000 doses/30 ml. Sterile needle and syringe should be used for this preparation. Hold the bird to be vaccinated with the head tilted to one side and dropping one drop of vaccine onto the eye of the bird. Be sure the vaccine spreads over the eye before releasing the bird.

## **Drinking water method**

Do not use a disinfectant in the drinking water for a period of48 hours prior to and 24 hours after vaccination. When a chlorine pump is used, switch it off for the same period of time. The waterers should be thoroughly cleaned before vaccination. No disinfectant shall be used. Close the water distribution system, raise and empty the nipple lines or empty the waterers. Water withholding period varies according to age of birds and climatic conditions (average 90 min). Prepare only the amount of vaccine to be used immediately. Use only plastic material and tools to prepare and administer vaccine. Prepare the required volume of water that will be consumed by the birds in 2 hours. This volume may change according to the climatic and environmental conditions.

Age	Min. amount of water/1000 birds
3 - 4 weeks	25 - 30 litres
From 10 weeks	40 litres

As an aid in preserving the virus activity, neutralise the chlorine with 2.5 g of skimmed milk powder per litre of water or 15 mg of sodium thiosulfate per litre of water. Do not use water containing high concentrations of metal ions. Mix the vaccine with clean, cool, non-chlorinated water by opening the vials under the water and let stand for 10 minutes. Open the water system, lower the lines and check distribution throughout the house. When the tank is empty, fill it with a solution of skimmed milk powder, let it stand for 10 minutes, then open the water system to flush out the remaining vaccine solution in the pipeworks. Vaccine solution can be distributed also manually by workers using plastic watering cans.

### Warnings & precautions

Newcastle Disease virus may cause a mild inflammation of the eyes in humans which last for 2 or 3 days. Care should therefore be taken when handling the virus to avoid contact with the eyes.

Satisfactory protection can be achieved only in healthy birds.

Always round the number of doses up (e.g. 20,000 doses for 19,750 birds), do not stretch dosage. All the birds in the flock must be vaccinated at the same time. Administer the vaccine during the coolest time of the day. Dispose of all opened vaccine containers remaining after vaccination, following the prescriptions of national or local regulations. Improper storage or handling of the vaccine may result in loss of potency.

## Side effects

Common: None

Rare: Catarrhal respiratory symptoms appear 4 to 6 days following vaccination but disappear in a few days.

# Storage

Store between +2°C and +8°C away from light and in a dry place. Keep all medicines out of reach of children.

**Packaging** Box of 20 x 1000 doses vials.

# Manufactured by

Laprovet, France

Marketed by Navana Pharmaceuticals Ltd. Rupshi, Rupganj, Narayanganj, Bangladesh

