6) Never administer less than one dose of vaccine per bird.

 Always distribute the vaccine evenly among clean waterers. Do not place the waterers in direct sunlight. Resume regular water administration only after all the vaccine water has been consumed.

### PRODUCT SAFETY

This vaccine will produce effective immunity. It has passed potency, safety and purity tests meeting all the requirements set forth by Arko Laboratories Ltd. and the USDA. The response to the product, the stimulation of antibodies within the turkey and the resultant level of immunity may be affected by other factors: management conditions, concurrent infections and stress levels at vaccination. Contains penicillin, streptomycin and amphotericin B as preservatives.

#### CAUTION

It is advised to record the vaccine serial number, the expiration date, the date of vaccination and any reactions observed. This product should be stored, transported and administered in accordance with the instructions and directions. The use of this vaccine is subject to state laws wherever applicable.

ARKO Laboratories Ltd.



Jewell, Iowa 50130 US Veterinary License No. 337

# Hemorrhagic Enteritis Vaccine

Live Virus

H.E. Vac

# 1,000, 2,000, 5,000 dose vials

Drinking water vaccination for healthy turkeys. Store this vaccine at not over 24 F (-4 C) for long term storage. May be stored for up to 30 days at not over 45 F (7 C). Do not vaccinate within 21 days before slaughter. Use entire contents when first opened. Burn vaccine container and all unused contents. Protect from sunlight. For veterinary use only. HEMORRHAGIC ENTERITIS VACCINE H.E. Vac is recommended for use in reducing losses due to Hemorrhagic Enteritis.

#### THE DISEASE

Hemorrhagic Enteritis is an acute disease of young growing turkeys caused by an avian adenovirus. It is characterized by depression, bloody droppings and sudden death. It generally affects poults between seven and twelve weeks of age, but some outbreaks have occurred as early as three weeks and as late as twenty weeks. Although mortality diminishes with increasing age - depending on the concentration of exposure virus - susceptible turkeys suffer a severe to moderate retardation in growth and weight gains.

## THE VACCINE

The turkey hemorrhagic enteritis virus vaccine is prepared from an apathogenic isolate of an avian adenovirus that is cytopathic in tissue culture and immunogenic in susceptible turkeys. The type II avian adenovirus is propagated in a Jymphoblastoid cell line (MDTC-RP19) of turkey origin. The tissue culture fluids are harvested, stabilized and frozen to provide the maximum concentration of viable vaccine virus at the time of use.

### THE USE

The vaccine is recommended for oral vaccination of healthy susceptible turkeys at thirty days of age. The vaccine aids in the prevention of morbidity and

mortality due to the effects of field strain hemorrhagic enteritis virus.

#### ADMINISTRATION AND DOSAGE

The vaccine should be administered in the drinking water at thirty days of age or older. Repeat annually. Birds vaccinated at a younger age may not develop adequate immunity due to maternal antibody.

1) Medications and disinfecting products in the drinking water are not compatible with the H.E. Vaccine. Discontinue their use at least 24 hours before vaccinating and do not resume their use for 24 hours after vaccination.

 Do not use chlorinated water for vaccination. Scrub and clean all waterers before vaccination with non-chlorinated water.

3) Flush the water lines with one pound of powdered milk per 100 gallons of water prior to vaccinating.

4) Let thaw and shake each vial of vaccine before removing the aluminum seal.

5) The vaccine is to be administered to 30 day old turkeys based on 1,000 doses of vaccine for every 1,000 birds. Using the information that 4 week old turkeys drink 40 gallons of water per 1000 birds per day, a stock solution would be prepared as follows. One thousand doses of vaccine would go to each 20 gallons of drinking water. For a proportioner that delivers 1 oz. per gallon or 1 gallon per 128 gallons, 6,000 doses of vaccine would be added to each gallon of stock solution. This should provide vaccine to the flock for about 12 hours which should allow for adequate vaccine coverage.