

# Volar<sup>®</sup>

## Fusobacterium Necrophorum Bacterin\* Footrot Bacterin



- First Federally Approved Fusobacterium Vaccine
- Aid in the Prevention of Acute Footrot in Dairy & Beef Cattle
- 61% to 88% Reduction in Clinical Symptoms of Footrot in Sheep
- Safe in Pregnant Ewes\*\*



# Product Information

## Volar®

### Fusobacterium Necrophorum Bacterin\*

#### Footrot Bacterin

#### INDICATIONS

An aluminum hydroxide adjuvanted bacterin containing two strains (isolates) of *Fusobacterium necrophorum* for use as an aid in the prevention and treatment of Chronic Footrot in sheep and the prevention of Acute Footrot in beef cattle.

#### DISEASE

Chronic Footrot in sheep is a synergistic infection caused by two gram negative bacteria, *Fusobacterium necrophorum* and *Bacteroides nodosus*.† The disease begins as an interdigital dermatitis which can extend into the adjacent hard horn. Sequential necrosis and regeneration of tissue result in eventual overgrowth and separation of horny tissues.

Acute Footrot in cattle is an infection caused by *F. necrophorum* initially characterized by necrosis of the interdigital skin with subsequent extension into deeper subcutaneous tissues. Clinical manifestations include swelling and acute lameness.††

#### DIRECTIONS AND RECOMMENDATIONS FOR USE

**Sheep:** For initial immunization, two doses are required. Aseptically inject a 3 mL dose intramuscularly or subcutaneously in the neck area. Repeat in 3 to 4 weeks. A booster dose should be given annually or at any time endemic conditions exist or exposure is imminent. For best results, sheep should be receiving a free choice mineral supplement providing 40 to 80 mg of zinc as zinc methionine per head per day.

† Berg, J.N.: Contagious Footrot of Sheep in: Howard, J.L. (ed.) Current Veterinary Therapy 2, Food Animal Practice. W.B. Saunders Co. Philadelphia, 895-896, 1986.

†† Berg, J.N.: Footrot of Cattle. In: Howard J.L. (ed.) Current Veterinary Therapy 2, Food Animal Practice. W.B. Saunders Co. Philadelphia, 894-895, 1986.

**Cattle:** For initial immunization, two doses are required. Aseptically inject a 5 mL dose intramuscularly or subcutaneously in the neck. Repeat in 3 to 4 weeks. A booster dose should be given annually or at any time endemic conditions exist or exposure is imminent. Volar has been shown to be effective against acute Footrot in cattle but not against chronic foot conditions.

#### DETERMINATION OF PROTECTION

Since Footrot involves a synergistic relationship between two organisms, *Fusobacterium necrophorum* and *Bacteroides nodosus*, protection against either organism can provide protection from disease. Volar has shown best protection under field conditions when animals were vaccinated prior to exposure. In addition, progression of the disease was inhibited in sheep already showing clinical signs of Footrot at the time of initial vaccination. Results of field trials conducted in over 650 sheep showed Volar to be highly effective in reducing clinical Footrot. Individual evaluation of over 2400 feet in multiple trials, including sheep with Footrot, showed statistically significant protection rates ranging from 61% to 88% (mean=80%) based upon clinical index.††† Final observations were made as late as six months post vaccination. Volar has also been shown to reduce incidence of disease in a field study involving over 1500 cattle. The over-all protection rate was 64%.

††† Individual foot scores were based upon a scale developed by Dr. John Berg, University of Missouri, Columbia, Missouri. Feet were examined by Dr. Berg for presence and severity of interdigital dermatitis, undermining of the wall, sole, or heel as well as degree of necrosis.

#### SAFETY

Volar has been shown to be safe in sheep and beef cattle when used in accordance with label recommendations. Volar has been shown to be safe in pregnant ewes. A study involving over 530 pregnant ewes showed no difference in lambing rates between controls and animals vaccinated twice in either early or late pregnancy. Additionally, the product has been shown to be safe in sheep and beef cattle in multiple dose and multiple injection studies. No overt reactions were seen in either species following primary or booster injections.

#### PRECAUTIONS

Shake well before using. Store at 35° to 45° F (2° to 7° C). Use entire contents when first opened. Do not vaccinate within 21 days before slaughter. Contains gentamycin and thimerosal as preservatives. Anaphylactoid reactions may occur.

**Antidote:** Epinephrine.

#### How Supplied

Code 4850—10 Doses (50 mL)  
4851—50 Doses (250 mL)

#### U.S. Vet License No. 52

\* Patent pending

\*\* Data available upon request

For more information about  
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