TETANUS

Tetanus is caused by infection with *Clostridium tetani*. The germ lives mainly in the soil, manure and dust. It exists in a spore form which is extremely resistant and may remain in this resting form for many years. The germ can enter the body at any point where there is a wound and upon entry quickly grows, producing a deadly poison which affects the nervous system. There is a gradual onset of stiffness followed by tetanic spasm of muscles. The signs are evident in the gait, eyelids, ears, nostrils and tails. The muscles do not relax completely between spasms.

SELENIUM DEFICIENCY

Selenium deficiency may be associated with:

- 1. White muscle disease (nutritional muscle degeneration) in lambs.
- 2. "Ill thrift" in young sheep.
- 3. Poor growth rate in lambs.
- 4. Periodontal disease (loose teeth) in adult sheep.
- 5. Diminished wool growth.

COOPERS TASVAX 5 IN 1 + SELENIUM VACCINE will be adversely affected by exposure to heat and light and by freezing.

WITHHOLDING PERIOD: Zero (0) days.

TRADE ADVICE

EXPORT SLAUGHTER INTERVAL (ESI): Zero (0) days.

FIRST AID

If poisoning occurs, contact a doctor or Poisons Information Centre. Phone Australia 131126. If skin contact occurs, remove contaminated clothing and wash skin thoroughly.

ADDITIONAL USER SAFETY INFORMATION

Take care to avoid self-injection.

In the event of self-administration, seek medical attention <u>if you are concerned</u>. Show the package leaflet or label to the Medical Practitioner.

Additional information is listed in the safety data sheet.

DISPOSAL

Dispose of empty container by wrapping with paper and putting in garbage. Discarded needles/sharps should immediately be placed in a designated and appropriately labelled 'sharps' container.

STORAGE

Store between 2°C and 8°C (refrigerate, do not freeze). Protect from light.

Warranty

Intervet Australia Pty Limited (IAPL), trading as MSD Animal Health, warrants that this product is of merchantable quality and fit for its intended purpose. IAPL's liability for any loss, including consequential losses or injury caused by act or omission, including negligent acts or omissions, by IAPL or its agent, is limited to replacing or repairing the product at the option of IAPL. If possible, a sample of any product causing concern should be retained or delivered to IAPL within 30 days for a scientific examination.

For further information contact Coopers Customer Service on 1800 226 511.

APVMA Approval No.: 61165/109609

COOPERS ANIMAL HEALTH

Intervet Australia Pty Limited

(trading as MSD Animal Health)

91-105 Harpin Street,

Bendigo East VIC 3550

Phone: 1800 226 511

www.coopersanimalhealth.com.au

- ® Registered Trademark
- [®] Yellow (PANTONE® 123) the predominant colour of Coopers packaging is a Registered Trademark. PANTONE is a registered trademark of Pantone. Inc.

POISON

183029 R5

Potency Units

Meets Ph.Eur.

5 U/mL

2.5 U/mL

3.5 U/mL

2.5 U/mL

KEEP OUT OF REACH OF CHILDREN READ SAFETY DIRECTIONS BEFORE OPENINGOR USING FOR ANIMAL TREATMENT ONLY



COOPERS®

TASVAX® 5 in 1

VACCINE FOR SHEEP, CATTLE AND GOATS

PLUS SELENIUM FOR LAMBS

ACTIVE CONSTITUENTS:

Clostridium perfringens Type D - toxoid

Clostridium chauvoei - toxoid and inactivated cells

Clostridium septicum - toxoid

Clostridium novyi Type B - toxoid and inactivated cells

Clostridium tetani - toxoid
0.5 g/L SELENIUM as SODIUM SELENATE

Contains 0.15 mg/mL THIOMERSAL as preservative.

CLOSTRIDIAL VACCINE for immunity against Pulpy Kidney, Blackleg, Malignant Oedema, Black Disease and Tetanus in sheep, cattle and goats and to protect against selenium deficiency in lambs.



DIRECTIONS FOR USE

Contraindications

This product is contraindicated for use when selenium intake from pasture is high or selenium is provided by other means (such as top dressing, vaccine, pellets or selenium drenches) if blood selenium levels at treatment are high. Users can determine selenium status by consulting their veterinarian.

Dosage and administration

Shake contents before use. Use all product within 24 hours of opening.

Do not expose directly to heat and light during use. The use of an insulated container is recommended during the day to protect the vaccine. If it is to be hung beside the race, ensure it is on the shady side.

Dose: Sheep, lambs and goats: 2 mL by subcutaneous injection.

Cattle: 4 mL by subcutaneous injection.

Inject only under the skin and not into the muscle, by raising a fold of skin and injecting the dose under the raised skin – **NOT INTO IT.**Cattle, sheep, goats should be injected high on the side of the neck, behind the ear.

IMPORTANT POINTS ON VACCINATION AND VACCINES

NOTE: A period of 2 weeks is required after vaccination before animals acquire a level of protection. Maximum protection is not achieved until the second dose is given.

VACCINATION PROGRAMME FOR SHEEP CATTLE AND GOATS:

To protect against	1. Sensitising Dose	2. 2nd Dose (1st Booster) AFTER 4 WEEKS	3. Annual Booster AFTER 52 WEEKS
Pulpy Kidney Black Disease Tetanus Blackleg Malignant Oedema plus Selenium Deficiency*	5 in 1 Plus Selenium	5 in 1, or 5 in 1 Plus Selenium	5 in 1

^{*} For lambs only. Before using TASVAX 5 IN 1 PLUS SELENIUM VACCINE seek veterinary advice to establish selenium deficiency. These products should only be used in selenium deficient areas.

SHEEP

Rams: Rams not previously vaccinated should be vaccinated twice at intervals of at least 4 weeks. An annual booster should be given. **Ewes:** Ewes not previously vaccinated should be vaccinated twice 4 to 6 weeks apart. The second shot should be timed to be given 2-3 weeks prior to lambing. This will protect lambs until approximately 8-10 weeks of age. If ewes have been previously vaccinated correctly against those diseases for which protection is required, then only the pre-lambing vaccination is required.

Lambs: Lambs born to vaccinated ewes should be vaccinated at marking and again after an interval of 4 to 6 weeks. Lambs born to unvaccinated ewes should be vaccinated as soon as possible and a second shot given at least 4 to 6 weeks later. The selenium containing vaccine may be used for the 4 to 6 week vaccination.

CATTLE

Bulls: Bulls not previously vaccinated should be vaccinated twice at intervals of at least 4 weeks. An annual booster should be given. **Cows:** Cows not previously vaccinated should be vaccinated at joining and again 2-3 weeks prior to calving. This will protect the calves for the first 8-10 weeks of age. Annual boosters will be required for full protection against diseases such as Blackleg and Malignant Oedema. Boosters against Pulpy Kidney (Enterotoxaemia) and Black Disease should be given to suit local and seasonal conditions. **Calves:** Calves should be vaccinated at about 2 months of age, with a second vaccination at least 4 weeks later.

GOATS

Bucks: Bucks not previously vaccinated should be vaccinated twice at intervals of at least 4 weeks. Boosters will be required at 4-6 monthly intervals in most instances.

Does: Does not previously vaccinated should be vaccinated at joining and again 2-3 weeks prior to kidding. This will protect the kids until approximately 8-10 weeks of age. Boosters will be required every 4-6 months in most instances, with one of these boosters being given 2-3 weeks prior to subsequent kiddings.

Kids: Kids born to vaccinated does should be vaccinated at marking and again at least 4 weeks later. Kids born to unvaccinated does should be vaccinated as soon as possible and again at least 4 weeks later. Boosters will be required every 4-6 months in most instances.

General directions

CAUTION: AVOID CARCASS DAMAGE:

- 1. Sterilise all injection apparatus by boiling for at least ten minutes before use. Avoid use of strong disinfectants on apparatus.
- 2. Maintain maximum cleanliness at all times.
- 3. Keep needles sharp and clean. Change needles frequently (every 20-30 animals). Use short needles. Recommended maximum sizes 15 mm x 18 gauge for sheep and goats; 15 mm x 16 gauge for cattle.
- 4. Check that the equipment is functioning properly and that it is delivering the correct dose.
- 5. As far as possible avoid injection of animals in wet weather or under dusty conditions.
- 6. Inject only under the skin and not into the muscle, by raising a fold of skin and injecting the dose under the raised skin NOT INTO IT.
- 7. Cattle, sheep, goats and lambs should be injected high on the side of the neck, behind the ear.

COOPERS TASVAX 5 IN 1 + SELENIUM VACCINE has been filtered and incorporates an adjuvant to enhance development of protection with minimum risk of damage at the site of vaccination.

COOPERS TASVAX 5 IN 1 + SELENIUM VACCINE has been manufactured in accordance with the standards of the European Pharmacopoeia.

Strict testing for potency, stability and safety is carried out to ensure standardised products which will confer rapid and prolonged protection to vaccinated stock.

THE DISEASES

Obtain veterinary advice for accurate diagnosis, and then use an appropriate vaccination programme.

BLACK DISEASE

Black disease is generally seasonal in appearance and is caused by infection with *Clostridium novyi* Type B. Black disease is an acute infectious disease of widespread occurrence, especially in areas where liver fluke are prevalent. Black disease germs live in the soil or in the livers of sheep in a resting form, or spore. Where damage has occurred in the liver due to fluke invasion, the germs grow rapidly and in doing so produce a powerful and deadly poison. Animals affected with Black Disease will suddenly lie down and die, apparently painlessly and without warning. The only method of prevention of Black Disease losses where fluke is prevalent is by vaccination.

N.B. Treatment for liver fluke and measures to control the snails which act as the intermediate host to the liver fluke should also be carried out.

TO PROTECT AGAINST SWELLED-HEAD IN RAMS (caused by Clostridium novvi Type B).

Vaccinate at 4-6 months of age with TASVAX 5 IN 1 VACCINE or TASVAX 5 IN 1 + SELENIUM VACCINE, followed by a booster dose after an interval of 4 to 6 weeks. Revaccinate annually 4 weeks before expected loss.

BLACKLEG/MALIGNANT OEDEMA

(both sometimes called Blood Poisoning)

Blackleg/Malignant Oedema is caused by an infection to wounds with *Clostridium chauvoei* and/or *Clostridium septicum*. These organisms contaminate the soil and are very resistant. They may attack singly or in combination. Young stock, thriving on good pasture, are very susceptible. The disease occurs most commonly after injuries caused quite often by shearing, marking, dipping, lambing etc. Some symptoms are rapid breathing, depression, lameness in one or more legs. The skin becomes purple and when touched may impart a crackling feeling due to the presence of gas in the tissue. In all areas where this disease occurs or is likely to occur, regular vaccination programmes should be adopted.

PULPY KIDNEY

(Enterotoxaemia)

Pulpy Kidney is caused by infection of *Clostridium perfringens* Type D. The bacteria causing this disease are normally present in the bowels of healthy sheep, cattle and goats. The germ, given favourable conditions such as a change from dry to lush feed or lush to dry feed, in effect, any type of sudden change in the food intake, grows rapidly and in so doing, produces a very strong poison, which is quickly fatal. Symptoms in young lambs are convulsions, clamping of the jaws, rolling eyes and the head drawn backward. In adult sheep, where the onset of the disease is slower, the symptoms are not as violent. A staggering gait may be noticed and some scouring is apparent just before death. It must be remembered that deaths occur suddenly, therefore protection by vaccination is the only sure method of prevention. Annual revaccination is advisable on heavily infected properties.

In cattle, losses due to Pulpy Kidney may be associated with pasture conditions which predispose to bloat. Seasonal boosters are recommended in such instances.

The disease is also the major killer of goats and close attention to a good vaccination programme is essential if losses are to be kept to a minimum.