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For use in healthy cattle, sheep, goats, swine and horses as an aid in the prevention of anthrax. A suspension of viable Bacillus anthracis Sterne Strain 34F2 spores in saponin.

DIRECTIONS:

Store at $2^{\circ} - 8^{\circ}$ C. Do not freeze. Shake well before use. Use entire contents when first opened. Do not vaccinate within 42 days before slaughter.

In areas where anthrax is known to be a problem, it is advisable to revaccinate annually approximately 4 weeks prior to the time the disease usually appears.

For control of outbreaks, vaccination of all animals not showing symptoms is recommended. Not all animals will be protected by this procedure but taking action as suggested may stop further spread of the disease. It is also recommended that animals showing symptoms be isolated and treated with antibiotics as permitted.

Do not give antibiotics within 3 weeks after vaccination.

Do not use disinfectants to sterilize equipment.

PRECAUTIONS:

In the event of accidental human exposure, consult a physician. There is a risk of adverse reactions (progressive edema) in sensitive species, including goats, young and miniature horses and llamas. Consult your veterinarian when considering vaccination of exotic or sensitive species and immunologically immature or stressed animals. Burn, autoclave or chemically disinfect container and all unused contents. Anaphylactoid reaction may occur following administration of products of this nature. If noted, administer adrenalin or equivalent.

DOSAGE AND ADMINISTRATION:

Inject 1 ml subcutaneously into each animal. Revaccinate in 2 to 3 weeks in heavily contaminated areas. The region of the neck just in front of the shoulder is a convenient site for administering the vaccine to cattle and swine. Sheep and goats should be vaccinated subcutaneously on their side (mid-thorax) halfway between the front and back legs. Horses may be vaccinated subcutaneously in the middle portion of the neck or in the brisket at a time when the animals are not being heavily worked. Light to moderate swelling may appear at the injection site. This will disappear after several days.





INDICATIONS:

For use in healthy sheep and goats as an aid in the prevention of Type 10 Bluetongue virus infection.

Incidence of Bluetongue is seasonal, with animals contracting the disease mostly in August and September due to the virus being transmitted by biting insects.

Contains penicillin and streptomycin as preservatives.

DIRECTIONS:

Store at $2^{\circ} - 8^{\circ}$ C. Rehydrate the vaccine (with accompanying diluent) immediately before use. Shake well after rehydration. Use entire contents when first opened. Do not administer to pregnant animals. Do not vaccinate within 21 days before slaughter.

Do not use disinfectants to sterilize equipment.

Treatment is ineffective. Preventive vaccination in late Spring or in the early Summer is recommended.

Lambs from immune ewes carry a degree of resistance to Bluetongue which may last as long as 3 months. Lambs should be vaccinated close to weaning time as this is the time when maternal antibodies disappear. If vaccinated too young, the maternal antibodies may interfere with proper active immune response.

All breeding stock should be protected with Bluetongue Vaccine approximately three weeks prior to breeding or after lambing.

PRECAUTIONS:

In the event of accidental human exposure, consult a physician. Burn, autoclave or chemically disinfect container and all unused contents. Anaphylactoid reaction may occur following administration of products of this nature. If noted, administer adrenalin or equivalent.

DOSAGE AND ADMINISTRATION:

Inject 2 ml subcutaneously or intramuscularly in axillary space (between foreleg and body).

Historically, annual vaccination is recomended. Contact your Veterinarian for advice.



For use as an aid in the prevention and treatment of enteric and respiratory conditions caused by the micro-organisms named.

This product was licensed prior to the requirement to establish a minimum age for use. Safety in pregnant animals is unknown.

In case of human exposure, contact a physician.

Contains thimerosal and phenol as preservatives.

DIRECTIONS:

Do not vaccinate within 21 days before slaughter. Shake well before use. Use entire contents when first opened. Store at $2^{\circ} - 8^{\circ}$ C. Do not freeze. Do not mix with other products.

PRECAUTIONS:

Anaphylactoid reaction may occur following administration of products of this nature. If noted, administer adrenalin or equivalent.

DOSAGE AND ADMINISTRATION:

Inject subcutaneously or intramuscularly.

PREVENTION:

Calves: 20-40 ml - as soon after birth as possible. Cattle: 50-75 ml Sheep: 10-15 ml

TREATMENT:

Calves: 40-100 ml Cattle: 75-150 ml Sheep: 20-40 ml

Administer at 12-24 hour intervals until improvement is noted.

BOVIB-LEPTO 5

Campylobacter Fetus-Leptospira Canicola-Grippotyphosa-Hardjo-Icterohaemorrhagiae-Pomona Bacterin Killed Bacterin



VLN: 188 / PCN: 2863.00

| Catalog # | Size | Dose |
|-----------|--------|---------|
| #11572 | 20 ml | 10 dose |
| #11574 | 100 ml | 50 dose |



INDICATIONS:

For use in healthy cattle as an aid in the prevention of infertility, delayed conception, abortions, and losses from diseases caused by the micro-organisms named.

Vaccine is an aqueous suspension of inactivated cultures of *Campylobacter fetus* subsp. *fetus, Leptospira canicola, grippotyphosa, hardjo, icterohaemorrhagiae*, and *pomona*. Contains aluminum hydroxide as an adjuvant.

Contains penicillin, streptomycin and thimerosal as preservatives.

DIRECTIONS:

Store at $2^{\circ} - 8^{\circ}$ C. Do not freeze. Shake well before use. Use entire contents when first opened. Do not vaccinate within 21 days before slaughter.

PRECAUTIONS:

Anaphylactoid reaction may occur following administration of products of this nature. If noted, administer adrenalin or equivalent.

DOSAGE AND ADMINISTRATION:

Inject one 2 ml dose subcutaneously. Administer 30 to 60 days prior to breeding. For exposed herds and in endemic areas, a second dose at 3 to 4 weeks is recommended.

Revaccinate annually using a single dose.







For use in healthy female cattle as an aid in the control of Bovine Genital Campylobacteriosis (vibriosis) caused by the subsp. named.

An aqueous suspension of inactivated cultures of *Campylobacter fetus* subsp. *fetus* in a mineral oil adjuvant.

Contains thimerosal as a preservative.

DIRECTIONS:

Store at $2^{\circ} - 8^{\circ}$ C. Do not freeze. Shake well before use. Use entire contents when first opened. Do not vaccinate within 60 days before slaughter.

PRECAUTIONS:

Anaphylactoid reaction may occur following administration of products of this nature. If noted, administer adrenalin or equivalent.

DOSAGE AND ADMINISTRATION:

Inject 2 ml subcutaneously in the top part of the neck.

Historically, annual vaccination is recomended. Contact your Veterinarian for advice.



INDICATIONS:

This product has been shown to be effective for the vaccination of healthy ewes against Ovine Genital Campylobacteriosis (vibriosis) caused by *Campylobacter fetus* and *Campylobacter jejuni*.

SHEEP

This product was licensed prior to the requirement to establish a minimum age for use. The duration of immunity is unknown. For more information regarding efficacy and safety data, see productdata.aphis.usda.gov.

Safety in pregnant animals is unknown.

An aqueous suspension of inactivated cultures of *Campylobacter fetus* and *Campylobacter jejuni* containing aluminum hydroxide as an adjuvant.

In case of human exposure, contact a physician.

Contains thimerosal as a preservative.

DIRECTIONS:

Do not vaccinate within 21 days before slaughter. Shake well before use. Use entire contents when first opened. Store at $2^{\circ} - 8^{\circ}$ C. Do not freeze. Do not mix with other products.

PRECAUTIONS:

Anaphylactoid reaction may occur following administration of products of this nature. If noted, administer adrenalin or equivalent. Local reactions of a transitory nature, common to adjuvanted products, may be observed.

DOSAGE AND ADMINISTRATION:

Inject 5 ml subcutaneously in the fold of the skin behind the axillary space, shortly before breeding. Repeat in 60 to 90 days. Historically, annual vaccination is recommended. Contact veterinarian for advice.



CASE-BAC Corynebacterium Pseudotuberculosis Bacterin - Toxoid Killed Bacterin-Toxoid



VLN: 188 / PCN: 7A94.00

| Catalog # | Size | Dose |
|-----------|--------|---------|
| #11442 | 20 ml | 10 dose |
| #11444 | 100 ml | 50 dose |



INDICATIONS:

For use in healthy sheep as an aid in the prevention of Caseous lymphadenitis.

A detoxified and purified whole culture of *Corynebacterium pseudotuberculosis*.

Contains thimerosal as a preservative.

DIRECTIONS:

Store at $2^{\circ} - 8^{\circ}$ C. Do not freeze. Shake well before use. Use entire contents when first opened. Do not vaccinate within 21 days before slaughter.

It has been shown that this product will aid in the prevention and control caseous lymphadenitis when sheep are vaccinated prior to exposure to the disease. It has also been shown that little or no benefit can be expected when animals with visible signs of the disease are vaccinated. Those showing infection should be immediately culled from the flock and disposed of or held away from those animals that appear to be in good health.

Slight lameness (soreness) in lambs may be observed, along with lethargy, in a percentage of the mature animals following vaccination. Sheep are inclined to become depressed and may limp after foreign substances are administered or because of increased exertion and stimulation of vaccination. While noticeable, these symptoms usually disappear within 24-48 hours and can be considered minor vaccination reactions. If suggested care is taken in preparing vaccination equipment and in administering the product there should be no abscessation at the site of injection.

PRECAUTIONS:

Anaphylactoid reaction may occur following administration of products of this nature. If noted, administer adrenalin or equivalent.

In the event of accidental human exposure, consult a physician.

DOSAGE AND ADMINISTRATION:

Inject 2 ml subcutaneously in axillary space. Repeat full 2 ml dose in 4 weeks (opposite axillary space).

Revaccinate annually using a single dose.

CASEOUS D-T

Clostridium Tetani-Perfringens Type D-Corynebacterium Pseudotuberculosis Bacterin-Toxoid Killed Bacterin Toxoid



VLN: 188 / PCN: 7894.00

| Catalog # | Size | Dose |
|-----------|--------|---------|
| #11452 | 20 ml | 10 dose |
| #11454 | 100 ml | 50 dose |



INDICATIONS:

For use in healthy sheep as an aid in the prevention of enterotoxemia associated with *Clostridium perfringens* Type D; toxemia caused by *Clostridium tetani*; and Caseous lymphadenitis, a disease characterized by localized collections of pus in the tissues of the body caused by *Corynebacterium pseudotuberculosis*.

Contains thimerosal as a preservative.

DIRECTIONS:

Store at $2^{\circ} - 8^{\circ}$ C. Do not freeze. Shake well before use. Use entire contents when first opened. Do not vaccinate within 21 days before slaughter.

It has been shown that this product will aid in the prevention and control of caseous lymphadenitis when sheep are vaccinated prior to exposure to the disease. It has also been shown that little or no benefit can be expected when animals with visible signs of the disease are vaccinated. Those showing infection should be immediately culled from the flock and disposed of or held away from those animals that appear to be in good health.

Slight lameness (soreness) in lambs may be observed, along with lethargy, in a percentage of the mature animals following vaccination. Sheep are inclined to become depressed and may limp after foreign substances are administered or because of increased exertion and stimulation of vaccination. While noticeable, these symptoms usually disappear within 24-48 hours and can be considered minor vaccination reactions. If suggested care is taken in preparing vaccination equipment and in administering the product there should be no abscessation at the site of injection.

PRECAUTIONS:

Anaphylactoid reaction may occur following administration of products of this nature. If noted, administer adrenalin or equivalent.

In the event of accidental human exposure, consult a physician.

DOSAGE AND ADMINISTRATION:

Inject 2 ml subcutaneously in axillary space. Repeat full 2 ml dose in 4 weeks (opposite axillary space).

Revaccinate annually using a single dose.





SHEEP

INDICATIONS:

This product has been shown to be effective for the vaccination of healthy ewes against Ovine Enzootic Abortion.

This product was licensed prior to the requirement to establish a minimum age for use. The duration of immunity is unknown. For more information regarding efficacy and safety data, see productdata.aphis.usda.gov.

Safety in pregnant animals is unknown.

An aqueous suspension of inactivated cultures of *Chlamydia abortus*, abortigenic serovar, emulsified with a mineral oil adjuvant.

In case of human exposure, contact a physician. Contains thimerosal as a preservative.

DIRECTIONS:

Do not vaccinate within 60 days before slaughter. Shake well before use. Use entire contents when first opened. Store at $2^{\circ} - 8^{\circ}$ C. Do not freeze. Do not mix with other products.

PRECAUTIONS:

Anaphylactoid reaction may occur following administration of products of this nature. If noted, administer adrenalin or equivalent. Use of products containing oil adjuvants may result in formation of a transient or more permanent granuloma of small to moderate size.

DOSAGE AND ADMINISTRATION:

Inject 2 ml subcutaneously in the upper part of neck 60 days prior to breeding. Repeat the dose in 30 days. Historically, annual vaccination is recommended. Contact veterinarian for advice.



INDICATIONS:

This potent multivalent antitoxin is specific for use as an aid in the temporary prevention or treatment of Clostridial enterotoxemia in cattle, sheep and goats caused by Types B, C and D toxin and in swine when caused by Type C. Type D is not known to cause disease in swine and Type B is not a significant problem in North America.

This product was licensed prior to the requirement to establish a minimum age for use. Safety in pregnant animals is unknown.

In case of human exposure, contact a physician.

Contains phenol and thimerosal as preservatives.

DIRECTIONS:

Do not vaccinate within 21 days before slaughter. Shake well before use. Use entire contents when first opened. Store at $2^{\circ} - 8^{\circ}$ C. Do not freeze. Do not mix with other products.

PRECAUTIONS:

Anaphylactoid reaction may occur following administration of products of this nature. If noted, administer adrenalin or equivalent. Do not use in equine species.

DOSAGE AND ADMINISTRATION:

For prevention lasting approximately 3 weeks the following doses should be administered subcutaneously:

| Suckling Lambs, Goats and Pigs: | 5 ml |
|---------------------------------|-------|
| Suckling Calves: | 10 ml |
| Feeder Lambs and Pigs: | 10 ml |
| Feeder Calves and Cattle: | 25 ml |

For treatment, double the preventative dose.

A more rapid effect can be achieved by intravenous administration, with repeat dosages as often as 12 hour intervals.





For use as an aid in the temporary prevention or treatment of Clostridial enterotoxemia in sheep and goats caused by perfringens type D toxin.

Contains phenol and thimerosal as preservatives.

DIRECTIONS:

Store at $2^{\circ} - 8^{\circ}$ C. Do not freeze. Shake well before use. Use entire contents when first opened. Do not vaccinate within 21 days before slaughter.

PRECAUTIONS:

Anaphylactoid reaction may occur following administration of products of this nature. If noted, administer adrenalin or equivalent.

DOSAGE AND ADMINISTRATION:

Shake well, use aseptic subcutaneous injection of the following doses for prevention:

| Suckling Lambs and Goats: | 5 ml |
|---------------------------|-------|
| Feeder Lambs: | 10 ml |

For treatment, double the preventative dose.

A more rapid effect can be achieved by intravenous administration, with repeat dosages as often as 12 hour intervals.

ESSENTIAL 1

Clostridium Haemolyticum-Bacterin (Red Water) Killed Bacterin



VLN: 188 / PCN: 2465.00

| Catalog # | Size | Dose |
|-----------|--------|---------|
| #11322 | 20 ml | 10 dose |
| #11324 | 100 ml | 50 dose |



INDICATIONS:

For use in healthy cattle, sheep and goats as an aid in the prevention of "Red Water" Disease (Bacillary Hemoglobinuria). Formalin inactivated *Clostridium haemolyticum*, aluminum hydroxide adsorbed.

Contains thimerosal as a preservative.

DIRECTIONS:

Store at $2^{\circ} - 8^{\circ}$ C. Do not freeze. Shake well before use. Use entire contents when first opened. Do not vaccinate within 21 days before slaughter.

PRECAUTIONS:

Anaphylactoid reaction may occur following administration of products of this nature. If noted, administer adrenalin or equivalent.

DOSAGE AND ADMINISTRATION:

Inject 2 ml subcutaneously or intramuscularly. Revaccinate every 5 to 6 months where constant exposure is likely. Spring vaccination is recommended because disease is most prevalent in summer months. Calves should be vaccinated at 3 to 4 months of age.

Revaccinate annually using a single dose.





CATTLE SHEEP GOATS

INDICATIONS:

For use in healthy cattle, sheep and goats as an aid in the prevention of Blackleg and Malignant Edema.

Product is aluminum hydroxide adsorbed. Contains thimerosal as a preservative.

DIRECTIONS:

Store at $2^{\circ} - 8^{\circ}$ C. Do not freeze. Shake well before use. Use entire contents when first opened. Do not vaccinate within 21 days before slaughter.

PRECAUTIONS:

Anaphylactoid reaction may occur following administration of products of this nature. If noted, administer adrenalin or equivalent.

DOSAGE AND ADMINISTRATION:

Inject 2 ml subcutaneously. Calves vaccinated under three months of age should be revaccinated at weaning or 4 to 6 months of age.

Revaccinate annually using a single dose.

ESSENTIAL 2+PClostridium Chauvoei-Septicum
Mannheimia Haemolytica-Pasteurella-
Multocida Bacterin
Killed BacterinVIII 188 / PCN: 2460.01VLN: 188 / PCN: 2460.012241135250 ml10 dose#11354250 ml50 dose



INDICATIONS:

For use in healthy cattle, sheep and goats as an aid in the prevention of Blackleg, Malignant Edema, and Pasteurellosis caused by the micro-organisms named.

Product is aluminum hydroxide adsorbed. Contains thimerosal as a preservative.

DIRECTIONS:

Store at $2^{\circ} - 8^{\circ}$ C. Do not freeze. Shake well before use. Use entire contents when first opened. Do not vaccinate within 21 days before slaughter.

PRECAUTIONS:

Anaphylactoid reaction may occur following administration of products of this nature. If noted, administer adrenalin or equivalent.

DOSAGE AND ADMINISTRATION:

Cattle - Inject 5ml subcutaneously. Calves vaccinated under three months of age should be revaccinated at weaning or 4 to 6 months of age.

Sheep and Goats - Inject 3 ml subcutaneously. Revaccinate with Mannheimia Haemolytica-Pasteurella Multocida Bacterin in 2 to 4 weeks.

Historically, annual vaccination is recomended. Contact your Veterinarian for advice.





This product has been shown to be effective for the vaccination of healthy cattle, sheep and goats against enterotoxemia caused by *Clostridium perfringens* Types B, C and D, and for the vaccination of healthy swine against Clostridium perfringens Type C. *Cl. perfringens* Type B is not a significant problem in North America.

This product was licensed prior to the requirement to establish a minimum age for use. The duration of immunity is unknown. For more information regarding efficacy and safety data, see productdata.aphis.usda.gov.

Safety in pregnant animals is unknown.

In case of human exposure, contact a physician.

Contains thimerosal as a preservative.

DIRECTIONS:

Do not vaccinate within 21 days before slaughter. Shake well before use. Use entire contents when first opened. Store at 2° – 8° C. Do not freeze. Do not mix with other products.

Vaccinate sufficiently in advance of feeding concentrated rations to provide a minimum of 2 weeks after second dose for adequate immunity to develop.

PRECAUTIONS:

Anaphylactoid reaction may occur following administration of products of this nature. If noted, administer adrenalin or equivalent.

DOSAGE AND ADMINISTRATION:

Inject 2 ml subcutaneously or intramuscularly. Repeat full dose in 3 to 4 weeks.

Historically, annual vaccination is recommended. Contact veterinarian for advice.

ESSENTIAL 3+T stridium Perfringens Types C&D Tetanus Toxoid Detoxified Toxin



VLN: 188 / PCN: 8304.00

| Catalog # | (| Size | Dose |
|-----------|-------|-------|----------|
| #11302 | 2 | 0 ml | 10 dose |
| #11304 | 1(| 00 ml | 50 dose |
| #11305 | 25 | 50 ml | 125 dose |
| CATTLE | SHEEP | GOATS | S SWINE |

INDICATIONS:

This product has been shown to be effective for the vaccination of healthy cattle, sheep and goats against enterotoxemia caused by *Clostridium perfringens* Types B, C and D, and for the vaccination of healthy swine against *Clostridium perfringens* Type C.

This product has also been shown to be effective for the vaccination of healthy cattle, sheep, goats and swine against tetanus.

This product was licensed prior to the requirement to establish a minimum age for use. The duration of immunity is unknown. For more information regarding efficacy and safety data, see productdata.aphis.usda.gov.

Cl. perfringens Type B is not a significant problem in North America. In case of human exposure, contact a physician.

Contains thimerosal as a preservative.

DIRECTIONS:

Do not vaccinate within 21 days before slaughter. Safety in pregnant animals is unknown. Shake well before use. Use entire contents when first opened. Store at $2^{\circ} - 8^{\circ}$ C. Do not freeze. Do not mix with other products.

PRECAUTIONS:

Anaphylactoid reaction may occur following administration of products of this nature. If noted, administer adrenalin or equivalent.

DOSAGE AND ADMINISTRATION:

Inject 2 ml subcutaneously or intramuscularly. Repeat full dose in 3 to 4 weeks. Historically, annual vaccination is recommended. Contact veterinarian for advice.





For use in healthy cattle, sheep and goats as an aid in the prevention of Blackleg, Malignant Edema, Black Disease, and *Clostridium sordellii* infection.

Product is aluminum hydroxide adsorbed. Contains thimerosal as a preservative.

DIRECTIONS:

Store at $2^{\circ} - 8^{\circ}$ C. Do not freeze. Shake well before use. Use entire contents when first opened. Do not vaccinate within 21 days before slaughter.

PRECAUTIONS:

Anaphylactoid reaction may occur following administration of products of this nature. If noted, administer adrenalin or equivalent.

DOSAGE AND ADMINISTRATION:

Cattle: 5 ml Inject subcutaneously or intramuscularly **Sheep and Goats:** 2.5 ml Inject subcutaneously or intramuscularly

Revaccination with a Bacterin containing *Clostridium sordellii* at 2 to 4 weeks. Repeat dose every 5 to 6 months in animals subject to re-exposure to *Clostridium novyi*, and revaccination of calves vaccinated under 3 months of age at weaning or 4 to 6 months of age.





INDICATIONS:

For use in healthy cattle and swine as an aid in the prevention of Leptospirosis caused by the organisms named.

Product is aluminum hydroxide adsorbed. Contains thimerosal as a preservative.

DIRECTIONS:

Store at $2^{\circ} - 8^{\circ}$ C. Do not freeze. Shake well before use. Use entire contents when first opened. Do not vaccinate within 21 days before slaughter.

Do not use as a diluent for live vaccines.

PRECAUTIONS:

Anaphylactoid reaction may occur following administration of products of this nature. If noted, administer adrenalin or equivalent.

DOSAGE AND ADMINISTRATION:

Inject 2 ml intramuscularly.

For swine, a second dose should be administered in 2 to 4 weeks later.

Annual single dose revaccination is recommended for both species.



MANNHEIMIA HAEMOLYTICA-PASTEURELLA MULTOCIDA BACTERIN

Killed Bacterin



VLN: 188 / PCN: 2700.00

| Catalog # | Size | Dose |
|-----------|--------|---------|
| #11652 | 20 ml | 10 dose |
| #11654 | 100 ml | 50 dose |
| | | |



INDICATIONS:

This product has been shown to be effective in the vaccination of healthy cattle, sheep and goats against Pasteurellosis caused by *Mannheimia haemolytica* and *Pasteurella multocida*. The duration of immunity is unknown. For more information regarding efficacy and safety data, see productdata.aphis.usda.gov.

Safety in pregnant animals is unknown.

This product was licensed prior to the requirement to establish a minimum age for use.

Chemically killed, aluminum hydroxide adsorbed, cultures of *Mannheimia haemolytica*, and *Pasteurella multocida*, Bovine isolates.

In case of human exposure, consult a physician. Contains thimerosal as a preservative.

DIRECTIONS:

Do not vaccinate within 21 days before slaughter. Shake well before use. Use entire contents when first opened. Store at $2^{\circ} - 8^{\circ}$ C. Do not freeze. Do not mix with other products.

PRECAUTIONS:

Anaphylactoid reaction may occur following administration of products of this nature. If noted, administer adrenalin or equivalent.

DOSAGE AND ADMINISTRATION:

Inject 2 ml subcutaneously. Administer two doses, 2 to 4 weeks apart. For advice on revaccination frequency, consult your veterinarian.

NORMAL SERUM

Equine Origin



VLN: 188 / PCN: 3602.00

| Catalog # | Size | Dose |
|-----------|--------|----------|
| #13102 | 100 ml | 100 dose |
| #13103 | 250 ml | 250 dose |



INDICATIONS:

For use as an aid in non-specific treatment of equine infections and disease conditions. Also recommended for non-specific treatment of haemorrhage, shock following injury, and debilitating conditions for which blood enrichment is desired. Administration provides supplemental equine albumin, globulins, and associated fluids.

Contains phenol and thimerosal as preservatives.

DIRECTIONS:

Store at $2^\circ-8^\circ$ C. Do not freeze. Use entire contents when first opened.

Do not vaccinate within 21 days before slaughter.

PRECAUTIONS:

Anaphylactoid reaction may occur following administration of products of this nature. If noted, administer adrenalin or equivalent.

A condition referred to as "serum hepatitis" infrequently occurs in horses. The literature associates this partially with the injection of biologics containing equine serum or tissue.

DOSAGE AND ADMINISTRATION:

Inject subcutaneously, intramuscularly, or intravenously, 50 ml to 250 ml depending upon weight of animal and judgment of veterinarian administering. Repeat doses may be given.

Use multiple sites or IV for large doses. It is recommended to limit injections to no more than 10 ml per injection site.







For use on healthy sheep and goats as an aid in the control of "Sore Mouth" disease. Contains penicillin and streptomycin as preservatives.

DIRECTIONS:

Store at $2^{\circ} - 8^{\circ}$ C. Use entire contents when first rehydrated. Do not vaccinate within 21 days before slaughter or within 24 hours of dipping or spraying.

It is advisable to vaccinate each new lamb and kid crop. Since exposure to infection can occur during shipping, range lambs moving into feedlots should be vaccinated at least 14 days before shipment to prevent possible rapid spread of the disease after arrival.

Normally only healthy animals should be vaccinated, but experience has shown that vaccination of infected sheep and lambs tends to shorten the course of disease during an outbreak of "Sore Mouth."

Do not use disinfectants to sterilize the syringe, brush/scarifier before and during use.

PRECAUTIONS:

In the event of accidental human exposure, consult a physician. Burn, autoclave or chemically disinfect container and all unused contents.

DOSAGE AND ADMINISTRATION:

Select a wool free area of skin, such as the inside of the flank and scarify the outer layer by scratching with the notched handle of the enclosed applicator. Scratching need not be deep enough to cause bleeding but should be sufficient to adequately roughen the skin. An area of at least one square inch should be scarified. Rehydrate the vaccine (with accompanying diluent) immediately before use and apply with enclosed brush or by placing a drop on the scarified area and brush vigorously.

Reddening and slight swelling at the site of administration should be observed a few days after vaccination. This will develop into raised areas that will rupture and scab over representing a "take" that indicates successful vaccination. Scabs will dry and fall off in about 2 to 4 weeks.





INDICATIONS:

This product has been shown to be effective in the vaccination of healthy cattle against infections caused by *Salmonella dublin* and *Salmonella typhimurium*. This product was licensed prior to the requirement to establish a minimum age for use. The duration of immunity is unknown. For more information regarding efficacy and safety data, see productdata.aphis.usda.gov.

Formalin killed, aluminum hydroxide adsorbed cultures of *Salmonella dublin* and *Salmonella typhimurium*, bovine isolates. Contains thimerosal as a preservative.

DIRECTIONS:

Do not vaccinate within 21 days before slaughter. Shake well before use. Use entire contents when first opened. Store at $2^{\circ} - 8^{\circ}$ C. Do not freeze. Do not mix with other products. Safety in pregnant animals is unknown.

PRECAUTIONS:

Anaphylactoid reaction may occur following administration of products of this nature. If noted, administer adrenalin or equivalent. In case of human exposure, contact a physician.

DOSAGE AND ADMINISTRATION:

In areas where *Salmonella* infections have been a problem, cattle should be given two subcutaneous injections of 2 ml each at an interval of 14 - 21 days. Vaccination of adult cattle is recommended prior to placing them on feed. It is recommended that newborn calves be left on cows for 7 days, after which this bacterin can be administered. Historically, annual vaccination is recommended. Contact veterinarian for advice.



For use as an aid in the prevention and treatment of tetanus in animals.

Contains phenol and thimerosal as preservatives.

DIRECTIONS:

Store at $2^{\circ} - 8^{\circ}$ C. Do not freeze. Use entire contents when first opened. Do not vaccinate within 21 days before slaughter.

Administration of Tetanus Antitoxin is recommended for use whenever a non-immunized animal, or one whose immune status is unknown, suffers a deep penetrating wound that has or may become contaminated with soil. It provides quick but shortterm protection. Antitoxin may also be administered to animals following castration, docking, and other operations performed on premises upon which tetanus infection has been a problem.

Vaccination with tetanus toxoid is recommended for healthy domestic animals not infected with tetanus, to establish an active immunity for prevention against disease.

If horses have received a tetanus toxoid vaccination within the previous 12 months, a tetanus toxoid booster is preferred over Tetanus Antitoxin for prophylaxis when these horses have penetrating wounds.

PRECAUTIONS:

Anaphylactoid reaction may occur following administration of products of this nature. If noted, administer adrenalin or equivalent.

In the event of accidental human exposure, consult a physician.

A condition referred to as "serum hepatitis" infrequently occurs in horses. The literature associates this partially with the injection of biologics containing equine serum or tissue.

DOSAGE AND ADMINISTRATION:

Tetanus Antitoxin confers immediate passive immunity lasting about 7 to 14 days. 1500 units administered subcutaneously or intramuscularly is the recommended dose for prevention.

Large doses of Tetanus Antitoxin may provide beneficial response in animals already infected with tetanus, but success of treatment is not assured. For treatment, administer 10,000 - 50,000 units to horses and cattle; 3,000 - 15,000 units to sheep and swine.

Animals that suffer slow healing puncture wounds or deep abrasions should be given a second dose of antitoxin in 7 days and additionally as considered necessary.



Detoxified Toxin

TETANUS TOXOID

Concentrated, Adjuvanted



VLN: 188 / PCN: 8601.00

| Catalog # | Size | Dose |
|-----------|-----------|-------------|
| #11411 | 10 x 1 ml | 10 x 1 dose |
| #11415 | 10 ml | 10 dose |



INDICATIONS:

This product has been shown to be effective for the vaccination of healthy horses, cattle, sheep, goats, and swine against tetanus. This product was licensed prior to the requirement to establish a minimum age for use. The duration of immunity is unknown. For more information regarding efficacy and safety data, see productdata.aphis.usda.gov.

Do not mix with other products. In case of human exposure, contact a physician.

Contains thimerosal as a preservative.

DIRECTIONS:

Do not vaccinate within 21 days before slaughter. Safety in pregnant animals is unknown. Shake well before use. Use entire contents when first opened. Store at $2^{\circ} - 8^{\circ}$ C. Do not freeze. See insert for complete information.

Vaccination with Tetanus Toxoid is recommended for healthy domestic animals, not infected with tetanus, to establish an active immunity for prevention against disease. Protective antibody levels usually occur about two weeks after the second injection of the primary immunization series.

In contrast, administration of Tetanus Antitoxin is recommended for immediate, emergency, passive treatment of exposed animals with an unknown vaccination history or with signs of tetanus infection. Refer to the Tetanus Antitoxin product circular for full information and consult with a veterinarian.

PRECAUTIONS:

Anaphylactoid reaction may occur following administration of products of this nature. If noted, administer adrenalin or equivalent.

DOSAGE AND ADMINISTRATION:

Primary Immunization: Two doses approx. 30 days apart. Historically, annual single dose revaccination has been recommended. Contact veterinarian for advice.

| Cattle and Horses: | 1 ml dose |
|--------------------|-----------|
| | |

Sheep, Goats, and Swine: 0.5 ml dose



CATTLE INDICATIONS:

This product has been shown to be effective for the vaccination of healthy horses, cattle, sheep, goats and swine against tetanus. This product was licensed prior to the requirement to establish a minimum age for use. The duration of immunity is unknown. For more information regarding efficacy and safety data, see productdata.aphis.usda.gov.

GOATS

SWINE

HORSE

Do not mix with other products. In case of human exposure, contact a physician.

Contains thimerosal as a preservative.

SHEEP

DIRECTIONS:

Do not vaccinate within 21 days before slaughter. Shake well before use. Use entire contents when first opened. Store at 2° - 8° C. Do not freeze. Safety in pregnant animals is unknown. See insert for complete directions.

Vaccination with Tetanus Toxoid is recommended for healthy domestic animals, not infected with tetanus, to establish an active immunity for prevention against disease. Protective antibody levels usually occur about two weeks after the second injection of the primary immunization series.

In contrast, administration of Tetanus Antitoxin is recommended for immediate, emergency, passive treatment of exposed animals with an unknown vaccination history or with signs of tetanus infection. Refer to the Tetanus Antitoxin product circular for full information and consult with a veterinarian.

PRECAUTIONS:

A transitory local reaction may occur at injection site. Anaphylactoid reaction may occur following administration of products of this nature. If noted, administer adrenalin or equivalent.

DOSAGE AND ADMINISTRATION: Horses: IM Cattle: IM or SC Sheep, Goats, Swine: IM or SC

Historically, annual revaccination is recommended. Contact veterinarian for advice.

Cattle/Horses: 2 doses of 10 ml each at 30 day intervals

Sheep/Goats/Swine: 2 doses of 1 ml each per cwt. at 30 day intervals



INDICATIONS:

This product has been shown to be effective for the vaccination of healthy cattle against viral warts (Papillomas). The duration of immunity is unknown.

This product was licensed prior to the requirement to establish a minimum age for use. For more information regarding efficacy and safety data, see productdata.aphis.usda.gov.

Tested for purity and safety.

In case of human exposure, contact a physician.

Contains thimerosal as a preservative.

DIRECTIONS:

Do not vaccinate within 21 days before slaughter. Safety in pregnant animals is unknown. Shake well before use. Use entire contents when first opened. Store at $2^{\circ} - 8^{\circ}$ C. Do not freeze. Do not mix with other products.

PRECAUTIONS:

Anaphylactoid reaction may occur following administration of products of this nature. If noted, administer adrenalin or equivalent.

DOSAGE AND ADMINISTRATION:

Calf Dose: 10 ml. Inject 5 ml subcutaneously in 2 separate sites along the side of the neck.

Cattle Dose: 15 ml. Inject 7.5 ml subcutaneously in 2 separate sites along the side of the neck.

Repeat at 3 to 5 weeks. Historically, annual vaccination is recommended. Contact veterinarian for advice.

*WE PAY \$100 PER POUND FOR YOUR CATTLE WARTS!

CONTACT US AT 303 - 295 - 7527 OR VISIT COLORADOSERUM.COM FOR FULL DETAILS.

*5lb minimum and, as always, the warts must be from U.S. sourced cattle.



CATTLE RESPIRATORY VACCINES

Colorado Serum Company can provide, on <u>special order</u>, the following modified-live virus vaccines below as well as other custom combinations.

For more information, please contact us at colorado-serum@colorado-serum.com

PRE-BREED 8

IBR-BVD-PI₃-LEPTO 5 Modified Live Virus/Killed Bacterin



VLN: 188 / PCN: 4439.00

| Catalog # | Size | Dose |
|-----------|--------|---------|
| #19552 | 20 ml | 10 dose |
| #19554 | 100 ml | 50 dose |



INDICATIONS:

For use in healthy cattle and calves as an aid in the prevention of disease caused by Bovine Rhinotracheitis virus, Bovine Virus Diarrhea virus (BVDV), Parainfluenza 3 virus, and leptospirosis caused by the micro-organisms named. The vaccine contains BVDV Type 1, with protection demonstrated against BVDV Type 1 challenge.

Contains thimerosal, penicillin, and streptomycin as preservatives.

DIRECTIONS:

Store at $2^{\circ} - 8^{\circ}$ C. Rehydrate with accompanying vial of Leptospira Bacterin, supplied as a component part of this package. Shake well after rehydration. Use entire contents when first opened.

Do not administer to pregnant cows or calves nursing pregnant cows. Do not administer to calves less than 4 weeks of age. See circular for more complete information.

Do not vaccinate within 21 days before slaughter.

PRECAUTIONS:

Anaphylactoid reaction may occur following administration of products of this nature. If noted, administer adrenalin or equivalent.

Burn, autoclave, or chemically disinfect this container and all unused contents.

DOSAGE AND ADMINISTRATION:

Inject 2 ml of the combined product intramuscularly (preferably in the neck region).

If necessary to vaccinate young calves, revaccinate these animals at 6 months of age.

RESPIRA-3

IBR-BVD-PI₃ Bovine Rhinotracheitis-Virus

Diarrhea-Parainfluenza₃ Vaccine Modified Live Virus



VLN: 188 / PCN: 1171.00

| Catalog # | Size | Dose |
|-----------|--------|---------|
| #19452 | 20 ml | 10 dose |
| #19454 | 100 ml | 50 dose |



INDICATIONS:

For use in healthy cattle and calves as an aid in the prevention of disease caused by Bovine Rhinotracheitis virus, Bovine Virus Diarrhea virus (BVDV) and Parainfluenza 3 virus. The vaccine contains BVDV Type 1, with protection demonstrated against BVDV Type 1 challenge.

Contains penicillin and streptomycin as preservatives.

DIRECTIONS:

Store at $2^{\circ} - 8^{\circ}$ C. Rehydrate the vaccine with the accompanying vial of diluent just prior to use with a sterile syringe and needle, without removing the stopper, and transfer it to the vial of dried vaccine. Shake well after rehydration. Use entire contents when first opened. Do not vaccinate within 21 days before slaughter.

Do not administer to pregnant cows or calves nursing pregnant cows. Do not administer to calves less than 4 weeks of age. Maternal antibodies in young calves may interfere with development of active immunity. If necessary to vaccinate young calves, revaccinate these animals at 6 months of age.

Cattle should be vaccinated before or when entering feedlots or areas where dairies are located.

Yearly booster injections are recommended for breeding stock. Be sure that breeding stock are vaccinated on a regular basis when cows are open.

Sterilize syringes and needles by boiling in clean water – do not use disinfectants or detergents.

PRECAUTIONS:

Anaphylactoid reaction may occur following administration of products of this nature. If noted, administer adrenalin or equivalent.

Burn, autoclave, or chemically disinfect this container and all unused contents.

DOSAGE AND ADMINISTRATION:

Inject 2 ml of the combined product intramuscularly (preferably in the neck region).





PROFESSIONAL BIOLOGICAL COMPANY

| PRODUCT | CATTLE | SHEEP | GOATS | SWINE | HORSE | PAGE |
|--|--------|-------|-------|-------|-------|--------|
| BRUCELLA ABORTUS VACCINE STRAIN RB-51 | | | | | | PG. 18 |
| CL. PERF. TYPES C&D ANTITOXIN | | | | | | PG. 18 |
| CL. PERF. TYPES C&D TOXOID | | | | | | PG. 19 |
| CL. PERF. TYPES C&D TETANUS TOXOID | | | | | | PG. 19 |
| NORMAL SERUM | | | | | | PG. 20 |
| PULMO-CLEAR CAPRINE SERUM FRACTION, IMMUNOMODULATOR | | | | | | PG. 20 |
| TETANUS ANTITOXIN | | | | | | PG. 21 |
| TETANUS ANTITOXIN CONCENTRATED/PURIFIED | | | | | | PG. 21 |
| TETANUS TOXOID CONCENTRATED | | | | | | PG. 22 |
| WEST NILE VIRUS ANTIBODY | | | | | | PG. 22 |

PROFESSIONAL BIOLOGICAL COMPANY IS NOW PROVIDING AUTOGENOUS BACTERINS AND VACCINES.

Please contact us for more details.

BRUCELLA ABORTUS VACCINE STRAIN RB-51

Live Culture



VLN: 188 / PCN: 1261.00

| Catalog # | Size | Dose |
|-----------|-------|---------|
| #62512 | 10 ml | 5 dose |
| #62513 | 50 ml | 25 dose |



INDICATIONS:

For use in healthy female cattle 4 to 12 months of age as an aid in the prevention of infection and abortion caused by Brucella abortus.

For use by or under the supervision of a veterinarian. Distribution in the United States shall be limited to authorized recipients designated by proper state officials under such additional conditions as these authorities may require.

DIRECTIONS:

Store at 2° - 8° C. Rehydrate with accompanying vial of sterile diluent. Diluent is a buffered solution specifically prepared for use with this vaccine. Shake well after rehydration. Use entire contents when first opened. Do not vaccinate within 3 weeks before slaughter.

Do not administer to pregnant cows unless authorized by state or federal animal health officials.

PRECAUTIONS:

Anaphylactoid reaction may occur following administration of products of this nature. If noted, administer adrenalin or equivalent.

In the event of accidental human exposure, consult a physician. WARNING - this organism is Rifampin and Penicillin resistant.

Burn, autoclave, or chemically disinfect container and all unused contents.

DOSAGE AND ADMINISTRATION:

Inject 2 ml subcutaneously.

CLOSTRIDIUM PERFRINGENS

TYPES C&D ANTITOXIN

Equine Origin





VLN: 188 / PCN: 6221.00 Catalog # 250 ml #63703



INDICATIONS:

This potent multivalent antitoxin is specific for use as an aid in the temporary prevention or treatment of Clostridial enterotoxemia in cattle, sheep and goats caused by Types B, C and D toxin and in swine when caused by Type C. Type D is not known to cause disease in swine and Type B is not a significant problem in North America.

This product was licensed prior to the requirement to establish a minimum age for use. Safety in pregnant animals is unknown.

In case of human exposure, contact a physician.

Contains phenol and thimerosal as preservatives.

DIRECTIONS:

Do not vaccinate within 21 days before slaughter. Shake well before use. Use entire contents when first opened. Store at 2° -8° C. Do not freeze. Do not mix with other products.

PRECAUTIONS:

Anaphylactoid reaction may occur following administration of products of this nature. If noted, administer adrenalin or equivalent. Do not use in equine species.

DOSAGE AND ADMINISTRATION:

For prevention lasting approximately 3 weeks the following doses should be administered subcutaneously:

| Suckling Lambs, Goats, and Pigs: | 5 ml |
|----------------------------------|-------|
| Suckling Calves: | 10 ml |
| Feeder Lambs and Pigs: | 10 ml |
| Feeder Calves and Cattle: | 25 ml |

For treatment, double the preventative dose. A more rapid effect can be achieved by intravenous administration, with repeat dosages as often as 12 hour intervals.



CLOSTRIDIUM PERFRINGENS TYPES C&D TOXOID

Detoxified Toxin





INDICATIONS:

This product has been shown to be effective for the vaccination of healthy cattle, sheep and goats against enterotoxemia caused by *Clostridium perfringens* Types B, C and D, and for the vaccination of healthy swine against *Clostridium perfringens* Type C. *Cl. perfringens* Type B is not a significant problem in North America.

This product was licensed prior to the requirement to establish a minimum age for use. The duration of immunity is unknown. For more information regarding efficacy and safety data, see productdata.aphis.usda.gov.

Safety in pregnant animals is unknown.

In case of human exposure, contact a physician.

Contains thimerosal as a preservative.

DIRECTIONS:

Do not vaccinate within 21 days before slaughter. Shake well before use. Use entire contents when first opened. Store at 2° - 8° C. Do not freeze. Do not mix with other products.

PRECAUTIONS:

Anaphylactoid reaction may occur following administration of products of this nature. If noted, administer adrenalin or equivalent.

DOSAGE AND ADMINISTRATION:

Inject 2 ml subcutaneously or intramuscularly. Repeat full dose in 3 to 4 weeks.

Historically, annual vaccination is recommended. Contact veterinarian for advice.

CLOSTRIDIUM PERFRINGENS
Detoxified ToxinDetoxified ToxinVEX: 188 / PCN: 8304.00VEX: 188 / PCN: 8304.00Étaiog # Size Dose#6130220 ml10 dose#61304100 ml50 dose#61305250 ml125 dose

INDICATIONS:

CATTLE

This product has been shown to be effective for the vaccination of healthy cattle, sheep and goats against enterotoxemia caused by *Clostridium perfringens* Types B, C and D, and for the vaccination of healthy swine against *Clostridium perfringens* Type C. *Cl. perfringens* Type B is not a significant problem in North America. This product has also been shown to be effective for the vaccination of healthy cattle, sheep, goats and swine against tetanus.

GOATS

SHEEP

SWINE

This product was licensed prior to the requirement to establish a minimum age for use. The duration of immunity is unknown. For more information regarding efficacy and safety data, see productdata.aphis.usda.gov.

In case of human exposure, contact a physician. Contains thimerosal as a preservative.

DIRECTIONS:

Do not vaccinate within 21 days before slaughter. Safety in pregnant animals is unknown. Shake well before use. Use entire contents when first opened. Store at $2^{\circ} - 8^{\circ}$ C. Do not freeze. Do not mix with other products.

PRECAUTIONS:

Anaphylactoid reaction may occur following administration of products of this nature. If noted, administer adrenalin or equivalent.

DOSAGE AND ADMINISTRATION:

Inject 2 ml subcutaneously or intramuscularly. Repeat full dose in 3 to 4 weeks.

Historically, annual vaccination is recommended. Contact veterinarian for advice.





For use as an aid in non-specific treatment of equine infections and disease conditions. Also recommended for non-specific treatment of haemorrhage, shock following injury, and debilitating conditions for which blood enrichment is desired. Administration provides supplemental equine albumin, globulins, and associated fluids.

Contains phenol and thimerosal as preservatives.

DIRECTIONS:

Store at $2^{\circ} - 8^{\circ}$ C. Do not freeze. Use entire contents when first opened. Do not vaccinate within 21 days before slaughter.

PRECAUTIONS:

Anaphylactoid reaction may occur following administration of products of this nature. If noted, administer adrenalin or equivalent.

A condition referred to as "serum hepatitis" infrequently occurs in horses. The literature associates this partially with the injection of biologics containing equine serum or tissue.

DOSAGE AND ADMINISTRATION:

Inject subcutaneously, intramuscularly, or intravenously, 50 ml - 250 ml depending upon weight of animal and judgment of veterinarian administering. Repeat doses may be given.

Use multiple sites or IV for large doses. It is recommended to limit injections to no more than 10 ml per injection site.

PULMO-CLEAR

Caprine Serum Fraction, Immunomodulator



VLN: 188 / PCN: 9360.00

| Catalog # | Size | Dose |
|-----------|-----------|-------------|
| #63321 | 10 x 2 ml | 10 x 1 dose |



INDICATIONS:

For use as an aid in the treatment of horses with Lower Respiratory Disease. To be used in combination with adjunctive therapy.

Contains phenol and thimerosal as preservatives.

NOTE: The complex nature of Lower Respiratory Disease makes treatment difficult for veterinarians who commonly prescribe antibiotics, anti-inflammatory drugs, bronchodilators, and expectorants. Cases often improve during treatment, but conditions can rapidly reoccur when treatment is stopped – extending recovery time and delaying a return to full health.

To address chronic and reoccurring cases of Lower Respiratory Disease, Pulmo-Clear works to modulate the immune system – allowing the horse improved recovery from the clinical conditions associated with ELRD.

CONTRAINDICATION:

Corticosteroids and other drugs which may cause immunosuppression are not recommended for use with this product.

DIRECTIONS:

Store at $2^{\circ} - 8^{\circ}$ C. Do not freeze. Use entire contents when first opened. Do not vaccinate within 21 days before slaughter.

PRECAUTIONS:

Anaphylactoid reaction may occur following administration of products of this nature. If noted, administer adrenalin or equivalent.

In the event of accidental human exposure, consult a physician.

DOSAGE AND ADMINISTRATION:

Inject one 2 ml dose deep intramuscularly in the neck. Repeat this dose in 7-10 days in the opposite side of the neck. Moderate exercise aids in preventing or reducing local reaction. Discontinue use if a severe local reaction occurs.

Proper diagnosis, selection of treatment modalities, and follow-up examinations for Lower Respiratory Disease in equines require veterinary expertise. Therefore, it is recommended that Pulmo-Clear be used by or under the supervision of a veterinarian.



TETANUS ANTITOXIN

Equine Origin



VLN: 188 / PCN: 6302.00 Catalog # Size Dose #63601 1 x 1,500 unit (5 ml) 1 dose #63603 10 x 1,500 unit (10 x 5 ml) 10 x 1 dose #63604 1 x 15,000 unit (50 ml) 10 dose CATTLE SHEEP GOATS SWINE HORSE

INDICATIONS:

For use as an aid in the prevention and treatment of tetanus in animals.

Contains phenol and thimerosal as preservatives.

DIRECTIONS:

Store at $2^{\circ} - 8^{\circ}$ C. Do not freeze. Use entire contents when first opened. Do not vaccinate within 21 days before slaughter.

Administration of Tetanus Antitoxin is recommended for use whenever a non-immunized animal, or one whose immune status is unknown, suffers a deep penetrating wound that has or may become contaminated with soil. It provides quick but shortterm protection. Antitoxin may also be administered to animals following castration, docking, and other operations performed on premises upon which tetanus infection has been a problem.

Vaccination with tetanus toxoid is recommended for healthy domestic animals not infected with tetanus, to establish an active immunity for prevention against disease.

If horses have received a tetanus toxoid vaccination within the previous 12 months, a tetanus toxoid booster is preferred over Tetanus Antitoxin for prophylaxis when these horses have penetrating wounds.

PRECAUTIONS:

Anaphylactoid reaction may occur following administration of products of this nature. If noted, administer adrenalin or equivalent.

In the event of accidental human exposure, consult a physician.

A condition referred to as "serum hepatitis" infrequently occurs in horses. The literature associates this partially with the injection of biologics containing equine serum or tissue.

DOSAGE AND ADMINISTRATION:

Tetanus antitoxin confers immediate passive immunity lasting about 7 to 14 days. 1500 units administered subcutaneously or intramuscularly is the recommended dose for prevention.

Large doses of Tetanus Antitoxin may provide beneficial response in animals already infected with tetanus, but success of treatment is not assured. For treatment, administer 10,000 - 50,000 units to horses and cattle; 3,000 - 15,000 units to sheep and swine.

Animals that suffer slow healing puncture wounds or deep abrasions should be given a second dose of antitoxin in 7 days and additionally as considered necessary.

| TETANUS ANTITOXIN CONCENTRATED/PURIFIED Equine Origin | | | |
|---|-------------------------|---------|--|
| VLN: 188 / PCN: 6302.01 | | | |
| Catalog # | Size | Dose | |
| #63611 | 1 x 1,500 unit (2 ml) | 1 dose | |
| #63614 | 1 x 15,000 unit (20 ml) | 10 dose | |



INDICATIONS:

Recommended for use in horses as an aid in the prevention and treatment of tetanus due to *Clostridium tetani*. This product is a purified, concentrated antitoxin, primarily immunoglobulin in nature.

Contains thimerosal as a preservative.

Recommended for use whenever a non-immunized horse or one whose tetanus vaccination status is unknown, suffers a deep penetrating wound that has or may become contaminated with soil. It provides quick but short term protection. Antibiotics can be used in conjunction with tetanus antitoxin or tetanus toxoid and are usually indicated in horses with wounds.

If horses have received a Tetanus Toxoid vaccination within the previous 12 months a tetanus Toxoid booster is preferred over Tetanus Antitoxin for prophylaxis when these horses have penetrating wounds.

DIRECTIONS:

Do not vaccinate within 21 days before slaughter. Store at $2^{\circ} - 8^{\circ}$ C. Do not freeze. Use entire contents when first opened.

PRECAUTIONS:

Anaphylactoid reaction may occur following administration of products of this nature. If noted, administer adrenalin or equivalent.

In the event of accidental human exposure, consult a physician.

A condition referred to as "serum hepatitis" infrequently occurs in horses. The literature associates this partially with the injection of biologics containing equine serum or tissue.

DOSAGE AND ADMINISTRATION:

Tetanus Antitoxin confers immediate passive immunity lasting about 7 to 14 days. One dose (2 ml) of 1,500 Units administered subcutaneously or intramuscularly in the neck is the recommended dose for prevention.

Slow healing puncture wounds or deep abrasions should be administered a second dose of antitoxin in 7 days and additionally as considered necessary.

Large doses of Tetanus Antitoxin may provide beneficial response in horses already affected with tetanus, but success of treatment is not assured. For treatment; administer 10,000 to 100,000 units. However, safety at the 100,000 unit level (67 doses or 134 ml) has not been demonstrated.





This product has been shown to be effective for the vaccination of healthy horses, cattle, sheep, goats, and swine against tetanus.

This product was licensed prior to the requirement to establish a minimum age for use. The duration of immunity is unknown.

For more information regarding efficacy and safety data, see productdata.aphis.usda.gov.

Do not mix with other products. In case of human exposure, contact a physician.

Contains thimerosal as a preservative.

DIRECTIONS:

Do not vaccinate within 21 days before slaughter. Safety in pregnant animals is unknown. Shake well before use. Use entire contents when first opened. Store at $2^{\circ} - 8^{\circ}$ C. Do not freeze. See insert for complete information.

Vaccination with Tetanus Toxoid is recommended for healthy domestic animals, not infected with tetanus, to establish an active immunity for prevention against disease. Protective antibody levels usually occur about two weeks after the second injection of the primary immunization series.

In contrast, administration of Tetanus Antitoxin is recommended for immediate, emergency, passive treatment of exposed animals with an unknown vaccination history or with signs of tetanus infection. Refer to the Tetanus Antitoxin product circular for full information and consult with a veterinarian.

PRECAUTIONS:

Anaphylactoid reaction may occur following administration of products of this nature. If noted, administer adrenalin or equivalent.

DOSAGE AND ADMINISTRATION:

Horses: IM. Cattle: IM or SC. Sheep, Goats, Swine: IM or SC

Primary Immunization: Two doses approx. 30 days apart. Historically, annual single dose revaccination has been recommended. Contact veterinarian for advice.

Cattle and Horses:1 ml doseSheep, Goats, and Swine:0.5 ml dose

WEST NILE VIRUS ANTIBODY

Equine Orgin

Concentrated/Purified



VLN: 188 / PCN: 3995.00

| Catalog # | Size |
|-----------|--------|
| #63801 | 50 ml |
| #63802 | 100 ml |



INDICATIONS:

For use in one year or older horses for treatment of disease caused by West Nile Virus.

For use by or under the supervision of a veterinarian. The product license is conditional. Efficacy and potency test studies in progress.

Contains thimerosal as a preservative.

DIRECTIONS:

This product has a 21 day withdrawal period. Warm to body temperature before use. Use entire contents when first opened. Store at $2^{\circ} - 8^{\circ}$ C. Do not freeze. Do not mix with other products.

PRECAUTIONS:

Anaphylactoid reaction, which occurs rarely, should be treated with administration of adrenalin or equivalent. A condition referred to as "serum hepatitis" has been associated infrequently with the use of biologics containing equine serum. Safety of repeated injections and use in pregnant animals have not been established.

DOSAGE AND ADMINISTRATION:

Product is for I.V. administration and may be given undiluted or diluted in Sterile Lactated Ringers Solution. Administer 10 ml per 100 lbs of body weight using a sterile I.V. catheter.

For use in one year or older horses for treatment of disease caused by West Nile Virus.

For use by or under the supervision of a veterinarian. The product license is conditional. Efficacy and potency test studies in progress.

Contains thimerosal as a preservative.



POLICIES AND TERMS OF SALE

- Prepaid ground shipping rates on orders of \$500 or more
- · Orders less than \$500 will be assessed shipping costs
- Current shipping rates will be assessed on customer requested expedited orders of one, two, or three-day service
- Orders requiring in excess of four concurrent working days will be shipped via 3-day service at customer expense unless customer advises otherwise
- · Payment terms are Net 30 days from invoice date
- Upon receipt of the shipment, verify product count. If your shipment is damaged or missing product, please report the issue to Colorado Serum Company within 10 days of receipt of the shipment. No adjustments will be made if this time frame is not met.

RETURN POLICY

- Expired product will be considered for return and credit at 75% of original purchase price. Some purchases and products may be sold on a non-returnable basis
- Request for return/credit authorization of eligible products must be in writing within 90 days after expiration date printed on product
- · Return/Credit request must include:
 - Product number & size
 - Serial number & expiration date
 - Quantity to be returned
 - Date of purchase and invoice number, if available
- · Products must be returned through original purchaser
- Credit will be issued at lower of purchase or current price and must be applied ONLY to future purchases within one year

We accept VISA, MASTERCARD, and AMEX for payment at time of shipment



Colorado Serum Company got its start in the early 1900's when Hog Cholera disease was decimating the swine industry in the United States.

Dr. J.N. Huff, a graduate of the Kansas City Veterinary College, moved to Denver, CO in 1922 to open a satellite manufacturing plant to the original "American Serum Company" founded in Sioux City, IA. Denver's high altitude provided hogs with added and enriched blood, so Colorado was considered an ideal environment for producing a new antiserum for Hog Cholera. In 1923, the small Denver plant began production and shortly thereafter separated from American Serum to become Colorado Serum Company. Hog Cholera was eventually eradicated from the United States.

Colorado Serum Company went on to expand its product lines to include a full range of large animal biologicals, large animal veterinary instruments, veterinary diagnostics, specialty products, and laboratory reagents. The facilities now cover 22 acres in Denver and contains all manufacturing as well as administrative offices. Products are marketed and distributed by numerous animal health companies across the globe.

Colorado Serum Company is proud to be a 4th generation family-owned company, riding the edge of current science while continuing the valued and time honored traditions of personal and responsive service.



4950 YORK STREET P.O. BOX 16428 DENVER, COLORADO 80216-0428

P: 303-295-7527 | F: 303-295-1923

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