



CONTENTS

1	Name of the veterinary medicinal product	3
2	Qualitative and quantitative composition	3
3	Pharmaceutical form	3
4	Clinical particulars	4
5	Immunological properties	6
6	Pharmaceutical particulars	7

These pages are general information pages. No guarantee is given as to the completeness of the information contained or its compliance with national regulatory requirements. Users should consult the local site of their countries to obtain information that complies with applicable national regulations.



1. NAME OF THE VETERINARY MEDICINAL PRODUCT

CEVAC Clostridium Ovino suspension for injection (ES) Coglavax S suspension for injection (IT) Panclostil S suspension for injection (EL)

2. QUALITATIVE AND QUANTITATIVE COMPOSITION

Composition for a 2-ml dose

Active substances:

Alpha toxoid of Clostridium perfringens type A	≥ 2.2 IU *
Beta toxoid of <i>Clostridium perfringens</i> type C	≥ 20.0 IU *
Epsilon toxoid of <i>Clostridium perfringens</i> type D	\geq 10.0 IU *
Toxoid of <i>Clostridium novyi</i> type B	≥ 7.0 IU *
Toxoid of <i>Clostridium septicum</i>	≥ 5.0 IU *
Toxoid of <i>Clostridium tetani</i>	≥ 5.0 IU *
Toxoid of Clostridium sordellii	100 % protection **
Anaculture of Clostridium chauvoei	\geq 90 % protection ***
* International Units ** Level of protection in control animal (mice) *** Level of protection in guinea-pics (in line with Ph. Eur.)	

*** Level of protection in guinea-pigs (in line with Ph. Eur.)

Adjuvant:

Aluminium hydroxide as Al(OH)3		5.19 mg
--------------------------------	--	---------

Excipients:

Formaldehyde $\leq 0.05 \% \text{ w/v}$

For a full list of excipients, see section 6.1

3. PHARMACEUTICAL FORM

Suspension for injection.

Lacteal suspension more or less coloured in clear brown.

4. CLINICAL PARTICULARS

4.1 | Target species

Sheep, pregnant ewe and lamb.

4.2 | Indications for use, specifying the target species

Active immunisation against enterotoxaemia due to C. *perfringens* type A, B, C and D, and *Clostridium sordellii* and clostridial infections due to C. *novyi* type B, *septicum, chauvoei* and tetani.

As primary or unique agents, these pathogens or their toxins cause the following diseases:

Pathogens	Diseases
Alpha toxin of Clostridium perfringens Type A	Enterotoxaemia and Yellow Lamb Disease
Beta toxin of <i>Clostridium perfringens</i> Type B and Type C	Lamb dysentery Haemorrhagic enteritis of lambs and Infectious Enterotoxaemia in sheep (or Struck)
Epsilon toxin Clostridium perfringens Type D	Pulpy kidney disease (Basquilla)
Toxin of Clostridium septicum	Bradsot or malignant oedema of abomasum
Toxin of <i>Clostridium novyi</i> Type B	Necrotic hepatitis
Toxin of Clostridium tetani	Tetanus
Clostridium chauvoei	Blackleg
Toxin of Clostridium sordellii	Enterotoxaemia in sheep

Lamb born from non-vaccinated mother: Two administrations of the vaccine at 2 and 6 weeks of age provide a significant immune response against the pathogens listed above, as from 2 weeks after the 2nd vaccination. This level lasts for 6 weeks, except for *C. tetani*. Booster vaccination (before a risk period): two weeks after vaccination, antibodies against the same components reach a significant level. This level lasts for 4 weeks, except for *C. chauvoe i* (not tested).

Lamb born from vaccinated mother: two administrations of the vaccine at 8 and 12 weeks of age provides a significant immune response as from 2 weeks after the 2nd vaccination and lasts for 6 weeks.

Booster vaccination (before a risk period): two weeks after vaccination, antibodies against the same components reach a significant level. This level lasts for 6 weeks, except for *C*. chauvoei (not tested).



<u>Pregnant ewe:</u> two administrations of the vaccine at 4 weeks interval age provides a significant immune response as from 2 weeks after the 2nd vaccination against Alpha, Beta, Epsilon toxins of *Clostridium perfringens* type A, B, C and D and toxins of *Clostridium septicum*, *novyi* type B, and *tetani*.

Passive immunisation: after two administrations of the vaccine at 4 weeks interval with the second one administered 2 to 5 weeks before expected lambing date, antibodies against Beta and Epsilon toxins expressed by *Clostridium perfringens* type C and D, are present in the colostrum of the vaccinated ewes.

Passive immunisation against the same pathogens will be transferred to lambs that receive colostrum in the first day after birth.

4.3 | Contraindications

None

4.4 | Special warnings for each target species

None

4.5 | Special precautions for use

a : Special precautions for use in animals

Administer only to healthy animals.

Special precautions to be taken by the person administering the veterinary medicinal product to animals

In case of accidental self-injection, seek medical advice immediately and show thepackage leaflet or the label to the physician

4.6 | Adverse reactions (frequency and seriousness)

A mild local reaction at the injection site is commonly expected. According to the safety studies in target species, swelling or a firm nodule appears 2-5 days after administration, reaching a maximum of 18-22 mm around 5 to 7 days after vaccination. It disappears without need for treatment after 20-30 days. In sheep, a slight pain at the injection site is commonly noticed. It disappears in 1 to 7 days.

4.7 | Use during pregnancy, lactation or lay

The vaccine can be used during pregnancy. The safety of the veterinary medicinal product has not been established during lactation.

4.8 | Interaction with other medicinal products and other forms of interaction

No information is available on the safety and efficacy of this vaccine when used with any other veterinary medicinal product. A decision to use this vaccine before or after any other veterinary medicinal product therefore needs to be made on a case by case basis.



4.9 | Amounts to be administered and administration route

Warm the vaccine before administration. Shake well before use. Respect normal aseptic conditions

Subcutaneous administration in the axillar region behind the elbow.

Lamb from non-vaccinated mother as from 2 weeks of age:

Vaccination: twice 2 ml 4 weeks apart, at two and six weeks of age **Re-vaccination:** booster vaccination should be programmed 2 to 4 weeks before any period of risk.

Lamb from vaccinated mother as from 8 weeks of age:

Vaccination: twice 2 ml 4 weeks apart, at eight and twelve weeks of age **Re-vaccination:** booster vaccination should be programmed 2 to 4 weeks before any period of risk.

Pregnant ewe:

Vaccination: twice 2 ml with 4 weeks interval, the second vaccine dose is administered 2 to 5 weeks before expected lambing date.

Re-vaccination: booster vaccination should be programmed 2 to 4 weeks before any period of risk. When a new pregnancy is programmed, re-vaccination should be carried out 2 to 5 weeks before the expected date of lambing.

Lambs should drink the colostrum during the day following birth.

Vaccination should also be carried out taking into account with great care the risk period or lambing date. The adequate vaccination program should be applied so that the peak of antibodies will be present in the animals during the risk period or at time of lambing.

4.10 | Overdose (symptoms, emergency procedures, antidotes), if necessary

Studies on the effect of the administration of a two-fold overdose in different sensitive categories (pregnant ewes, 2 and 8 week-old lambs) have shown that a mild local reaction at the injection site is expected. Swelling or a firm nodule appears 2-6 days after administration, reaching a maximum of 23-27 mm around 5 to 8 days after vaccination. It disappears without need for treatment after 20-30 days. In sheep, an overdose commonly triggers a slight pain at the injection site. It disappears in 1 to 8 days.

4.11 | Withdrawal period

Zero days

5. IMMUNOLOGICAL PROPERTIES

Pharmacotherapeutic group: Sheep, inactivated clostridium vaccine ATCvet code: QI04AB01



Summary presentation of active ingredients

The active ingredients (a mixture of toxoids and whole inactivated culture) present in the vaccine are aiming at the immunisation of sheep against the pathogens involved in diseases (as primary or unique agents), listed in section 4.2.

The vaccine provides active or passive immunisation against those pathogens. The action of neutralising antibodies is known to be determinant in the protection of sheep against enterotoxaemia due to *C. perfringens* type A, B, C and D and *Clostridium sordellii* and clostridial infections due to *C. novyi* type B, *septicum, tetani and chauvoei.*

6. PHARMACEUTICAL PARTICULARS

6.1 | List of excipients

Aluminium hydroxide as Al(OH)3 Trometamol Maleic acid Sodium chloride Free formaldehyde Water for injection

6.2 | Incompatibilities

Do not mix with any other veterinary medicinal product.

6.3 | Shelf life

Shelf-life of the veterinary medicinal product as packaged for sale: 21 months Shelf-life after first opening the immediate packaging: use immediately.

6.4 | Special precautions for storage

The product must be stored between +2°C and +8°C protected from light. Do not freeze.

6.5 | Nature and composition of immediate packaging

Carton box with 1 LDPE (Low Density Polyethylene Eur. Ph. 3.1.4) bottle of 50, 100 or 250 ml with 20 mm H 4001/A grey brombutyl (Eur. Ph. 3.2.2 type I.) stopper and aluminium cap. Not all pack sizes may be marketed.

6.6 | Special precautions for the disposal of unused veterinary medicinal product or waste materials derived from the use of such products

Any unused veterinary medicinal product or waste materials should be disposed of in accordance with local requirements.

