1. NAME OF THE VETERINARY MEDICINAL PRODUCT

NUFLOR Swine 300 mg/mL Solution for injection

2. QUALITATIVE AND QUANTITATIVE COMPOSITION

Each mL contains:

Active substance:

Florfenicol 300.00 mg

Excipients:

Qualitative composition of excipients and other constituents	Quantitative composition if that information is essential for proper administration of the veterinary medicinal product
N-methylpyrrolidone	250 mg
Propylene glycol	
Macrogol 300	

Clear, light yellow to straw-colored, somewhat viscous solution, free from foreign matter.

3. CLINICAL INFORMATION

3.1 Target species

Pigs.

3.2 Indications for use for each target species

Treatment of acute outbreaks of swine respiratory disease caused by strains of *Actinobacillus pleuropneumoniae* and *Pasteurella multocida* susceptible to florfenicol.

3.3 Contraindications

Do not administer to boars intended for breeding. See section 3.7. Do not administer in cases of previous allergic reactions to florfenicol. Do not use in cases of hypersensitivity to the active substance or to any of the excipients. Do not use in piglets of less than 2 kg.

3.4 Special warnings

None.

3.5 Special precautions for use

Special precautions for safe use in the target species:

The veterinary medicinal product should be used in conjunction with susceptibility testing and take into account official and local antimicrobial policies.

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

Do not use the veterinary medicinal product in known cases of sensitivity to propylene glycol and polyethylene glycols.

Care should be taken to avoid accidental self-injection.

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

Laboratory studies in rabbits and rats with the excipient N-methyl pyrrolidone have shown evidence of foetotoxic effects. Women of childbearing age, pregnant women or women suspected of being pregnant should use the veterinary medicinal product with serious caution to avoid accidental selfinjection.

Special precautions for the protection of the environment:

Not applicable.

3.6 **Adverse events**

Pigs:

Common	Diarrhoea ¹ ;
(1 to 10 animals / 100 animals	Perianal inflammation ¹ , Rectal oedema ¹ ;
treated):	Pyrexia ² , Depression ² ;
	Dyspnoea ² ;
Very rare	Injection site swelling ³ , Injection site lesion ⁴ , Injection site inflammation ⁴ .
(<1 animal / 10,000 animals treated, including isolated reports):	

¹Can be observed for one week in 50% of the animals.

² Under field conditions in approximately 30% of treated pigs aweek or more after administration of the second dose.

³Lasting up to 5 days.

⁴ May be seen up to 28 days.

Reporting adverse events is important. It allows continuous safety monitoring of a veterinary medicinal product. Reports should be sent, preferably via a veterinarian, to either the marketing authorisation holder or its local representative or the national competent authority via the national reporting system. See the package leaflet for respective contact details.

3.7 Use during pregnancy, lactation or lay

Pregnancy, lactation and fertility:

The safety of the veterinary medicinal product has not been established in pigs during pregnancy, lactation or in animals intended for breeding. Laboratory studies in rabbits and rats with the excipient N-methyl pyrrolidone have shown evidence of foetotoxic effects.

Do not use the product during pregnancy and lactation.

Interaction with other medicinal products and other forms of interaction 3.8

None known.

3.9 Administration routes and dosage

Intramuscular use.

15 mg/kg bodyweight (1 mL per 20 kg) by intramuscular use into the neck muscle twice at 48 hour intervals using a 16-gauge needle.

The volume administered per injection site should not exceed 3 mL.

It is recommended to treat animals in the early stages of disease and to evaluate the response to treatment within 48 hours after the second injection. If clinical signs of respiratory disease persist 48 hours after the last injection, treatment should be changed using another formulation or another antibiotic and continued until clinical signs have resolved.

Wipe the stopper before removing each dose. Use a dry, sterile syringe and needle.

Do not broach the vial more than 25 times.

To ensure a correct dosage body weight should be determined as accuracy as possible to avoid underdosing.

3.10 Symptoms of overdose (and where applicable, emergency procedures and antidotes)

In swine after administration of 3 times the recommended dose or more a reduction in feeding, hydration and weight gain has been observed.

After administration of 5 times the recommended dose or more vomiting has also been noted.

3.11 Special restrictions for use and special conditions for use, including restrictions on the use of antimicrobial and antiparasitic veterinary medicinal products in order to limit the risk of development of resistance

Not applicable.

3.12 Withdrawal periods

Meat and offal: 18 days.

4. PHARMACOLOGICAL INFORMATION

4.1 ATCvet code: QJ01BA90

4.2 Pharmacodynamics

Florfenicol is a broad-spectrum synthetic antibiotic active against most Gram-positive and Gramnegative bacteria isolated from domestic animals. Florfenicol acts by inhibition of protein synthesis at the ribosomal level and is bacteriostatic. However, bactericidal activity has been demonstrated *in vitro* against *Actinobacillus pleuropneumoniae* and *Pasteurella multocida*.

In vitro testing has shown that florfenicol is active against the bacterial pathogens most commonly isolated in respiratory diseases in pigs, including *Actinobacillus pleuropneumoniae* and *Pasteurella multocida*.

4.3 Pharmacokinetics

In pigs intravenously administered florfenicol had a mean plasma clearance rate of 5.2 mL/min/kg and a mean volume of distribution at equilibrium of 948 mL/kg. The mean terminal half-life is 2.2 hours.

After initial intramuscular administration of florfenicol, maximum serum concentrations of between 3.8 and 13.6 µg/mL are reached after 1.4 hours and the concentrations deplete with a terminal mean half-life of 3.6 hours. After a second intramuscular administration, maximum serum concentrations of between 3.7 and 3.8 µg/mL are reached after 1.8 hours. Serum concentrations drop below 1 µg/mL, the MIC₉₀ for the target porcine pathogens, 12 to 24 hours following IM administration. Florfenicol concentrations achieved in lung tissue reflect plasma concentrations, with a lung:plasma concentration ratio of approximately 1.

After administration to pigs by the intramuscular route, florfenicol is rapidly excreted, primarily in urine. The florfenicol is extensively metabolised.

5. PHARMACEUTICAL PARTICULARS

5.1 Major incompatibilities

In the absence of compatibility studies, this veterinary medicinal product must not be mixed with other veterinary medicinal products.

5.2 Shelf life

Shelf life of the veterinary medicinal product as packaged for sale: 2 years. Shelf life after first opening the immediate packaging: 28 days.

5.3 Special precautions for storage

Do not store above 25°C. Do not refrigerate. Protect from frost. Discard unused material.

5.4 Nature and composition of immediate packaging

Colourless Type I glass vials closed with Grey bromobutyl rubber stoppers with aluminium seals, in a cardboard box.

Cardboard box containing 1 vial of 20 ml, 50 ml, 100 ml, 250 ml and 500 ml.

Not all pack sizes may be marketed.

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

Medicines should not be disposed of via wastewater or household waste.

The veterinary medicinal product should not enter water courses as florfenicol may be dangerous for aquatic organisms.

Use take-back schemes for the disposal of any unused veterinary medicinal product or waste materials derived thereof in accordance with local requirements and with any national collection systems applicable to the veterinary medicinal product concerned.

6. NAME OF THE MARKETING AUTHORISATION HOLDER

{To be completed nationally, in accordance with SPOR}

7. MARKETING AUTHORISATION NUMBER(S)

{To be completed nationally}

8. DATE OF FIRST AUTHORISATION

Date of first authorisation:{DD/MM/YYYY} {To be completed nationally}

9. DATE OF THE LAST REVISION OF THE SUMMARY OF THE PRODUCT CHARACTERISTICS

{DD/MM/YYYY} {To be completed nationally}

10. CLASSIFICATION OF VETERINARY MEDICINAL PRODUCTS

Veterinary medicinal product subject to prescription.

Detailed information on this veterinary medicinal product is available in the <u>Union Product Database</u> (<u>https://medicines.health.europa.eu/veterinary</u>).

ANNEX III

LABELLING AND PACKAGE LEAFLET

A. LABELLING

PARTICULARS TO APPEAR ON THE OUTER PACKAGE

Carton box for the 20, 50, 100, 250 and 500 mL vials

1. NAME OF THE VETERINARY MEDICINAL PRODUCT

NUFLOR Swine 300 mg/mL Solution for injection

2. STATEMENT OF ACTIVE SUBSTANCES

Each mL contains: Florfenicol 300.00 mg

3. PACKAGE SIZE

20 mL 50 mL 100 mL 250 mL 500 mL

4. TARGET SPECIES

Pigs.

5. INDICATIONS

6. ROUTES OF ADMINISTRATION

Intramuscular use.

7. WITHDRAWAL PERIODS

Meat and offal: 18 days

8. EXPIRY DATE

Exp. {mm/yyyy}

Once broached, use within 28 days.

9. SPECIAL STORAGE PRECAUTIONS

Do not store above 25°C. Do not refrigerate. Protect from frost. Discard unused material.

10. THE WORDS "READ THE PACKAGE LEAFLET BEFORE USE"

Read the package leaflet before use.

11. THE WORDS "FOR ANIMAL TREATMENT ONLY"

For animal treatment only.

12. THE WORDS "KEEP OUT OF THE SIGHT AND REACH OF CHILDREN"

Keep out of the sight and reach of children.

13. NAME OF THE MARKETING AUTHORISATION HOLDER

{To be completed nationally, in accordance with SPOR}

14. MARKETING AUTHORISATION NUMBERS

{To be completed nationally}

15. BATCH NUMBER

Lot {number}

PARTICULARS TO APPEAR ON THE IMMEDIATE PACKAGE

Label for the 100, 250 and 500 mL vials

1. NAME OF THE VETERINARY MEDICINAL PRODUCT

NUFLOR Swine 300 mg/mL Solution for injection

2. STATEMENT OF ACTIVE SUBSTANCES

Each mL contains: Florfenicol

300.00 mg

3. TARGET SPECIES

Pigs.

4. ROUTES OF ADMINISTRATION

Intramuscular use.

5. WITHDRAWAL PERIODS

Meat and offal: 18 days

6. EXPIRY DATE

Exp. {mm/yyyy}

Once broached, use within 28 days.

7. SPECIAL STORAGE PRECAUTIONS

Do not store above 25°C. Do not refrigerate. Protect from frost. Discard unused material.

8. NAME OF THE MARKETING AUTHORISATION HOLDER

{To be completed nationally, in accordance with SPOR}

9. BATCH NUMBER

Lot {number}

MINIMUM PARTICULARS TO APPEAR ON SMALL IMMEDIATE PACKAGING UNITS

Label for the 20 and 50 mL vials

1. NAME OF THE VETERINARY MEDICINAL PRODUCT

NUFLOR Swine

2. QUANTITATIVE PARTICULARS OF THE ACTIVE SUBSTANCES

Each mL contains: Florfenicol 300.00 mg

3. BATCH NUMBER

Lot {number}

4. EXPIRY DATE

Exp. {mm/yyyy}

Once broached, use within 28 days.

B. PACKAGE LEAFLET

PACKAGE LEAFLET

1. Name of the veterinary medicinal product

NUFLOR Swine 300 mg/mL Solution for injection

2. Composition

Each mL contains:

Active substance:

Florfenicol 300.00 mg

Excipients:

N-methylpyrrolidone 250 mg

Clear, light yellow to straw-colored, somewhat viscous solution, free from foreign matter.

3. Target species

Pigs.

4. Indications for use

Treatment of acute outbreaks of swine respiratory disease caused by strains of *Actinobacillus pleuropneumoniae* and *Pasteurella multocida* susceptible to florfenicol.

5. Contraindications

Do not administer to boars intended for breeding. Do not administer in cases of previous allergic reactions to florfenicol. Do not use in cases of hypersensitivity to the active substance or to any of the excipients. Do not use in piglets of less than 2 kg.

6. Special warnings

None.

Special precautions for safe use in the target species:

The veterinary medicinal product should be used in conjunction with susceptibility testing and take into account official and local antimicrobial policies.

Special precautions to be taken by the person administering the veterinary medicinal product to <u>animals</u>:

Do not use the veterinary medicinal product in known cases of sensitivity to propylene glycol and polyethylene glycols.

Care should be taken to avoid accidental self-injection.

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

Laboratory studies in rabbits and rats with the excipient N-methyl pyrrolidone have shown evidence of fetotoxic effects. Women of childbearing age, pregnant women or women suspected of being pregnant should use the veterinary medicinal product with serious caution to avoid accidental self-injection.

Pregnancy, lactation and fertility:

The safety of the veterinary medicinal product has not been established in pigs during pregnancy, lactation or in animals intended for breeding. Laboratory studies in rabbits and rats with the excipient N-methyl pyrrolidone have shown evidence of foetotoxic effects. Use of the product during pregnancy and lactation is not therefore recommended.

Interaction with other medicinal products and other forms of interaction:

None known.

Overdose:

After administration of overdoses, a reduction in feeding, hydration and weight gain as well as vomiting has been observed.

Major incompatibilities:

Do not mix with any other veterinary medicinal product.

7. Adverse events

Pigs:

Common	Diarrhoea ¹ ;
(1 to 10 animals / 100 animals	Perianal inflammation ¹ , Rectal oedema (swelling) ¹ ;
treated):	Pyrexia (fever) ² , Depression ² ;
	Dyspnoea (difficulty breathing) ² ;
Very rare	Injection site swelling ³ , Injection site lesion ⁴ , Injection site inflammation ⁴ .
(<1 animal / 10,000 animals treated, including isolated reports):	

¹Can be observed for one week in 50% of the animals.

² Under field conditions in approximately 30% of treated pigs a week or more after administration of the second dose.

³Lasting up to 5 days.

⁴ May be seen up to 28 days.

Reporting adverse events is important. It allows continuous safety monitoring of a product. If you notice any side effects, even those not already listed in this package leaflet, or you think that the medicine has not worked, please contact, in the first instance, your veterinarian. You can also report any adverse events to the marketing authorisation holder <or the local representative of the marketing

authorisation holder> using the contact details at the end of this leaflet, or via your national reporting system: {national system details} {<> to be adjusted nationally}

8. Dosage for each species, routes and method of administration

Intramuscular use.

15 mg/kg bodyweight (1 mL per 20 kg) by intramuscular use into the neck muscle twice at 48 hour intervals using a 16-gauge needle. Do not use in piglets of less than 2 kg.

It is recommended to treat animals in the early stages of disease and to evaluate the response to treatment within 48 hours after the second injection. If clinical signs of respiratory disease persist 48 hours after the last injection, treatment should be changed using another formulation or another antibiotic and continued until clinical signs have resolved.

9. Advice on correct administration

The volume administered per injection site should not exceed 3 mL.

Wipe the stopper before removing each dose. Use a dry, sterile syringe and needle.

Do not broach the vial more than 25 times.

To ensure a correct dosage body weight should be determined as accuracy as possible to avoid underdosing.

10. Withdrawal periods

Meat and offal: 18 days.

11. Special storage precautions

Keep out of the sight and reach of children.

Do not store above 25°C Do not refrigerate. Protect from frost. Discard unused material.

Do not use this veterinary medicinal product after the expiry date which is stated on the label and carton after Exp. The expiry date refers to the last day of that month. Shelf life after first opening the immediate packaging: 28 days.

12. Special precautions for disposal

Medicines should not be disposed of via wastewater or household waste. {<> to be adjusted nationally}

The veterinary medicinal product should not enter water courses as florfenicol may be dangerous for aquatic organisms.

Use take-back schemes for the disposal of any unused veterinary medicinal product or waste materials derived thereof in accordance with local requirements and with any applicable national collection systems. These measures should help to protect the environment.

Ask your veterinary surgeonorpharmacist how to dispose of medicines no longer required. {<> to be adjusted nationally}

13. Classification of veterinary medicinal products

Veterinary medicinal product subject to prescription.

14. Marketing authorisation numbers and pack sizes

{<> MA no. to be adjusted nationally} Colourless Type I glass vials closed with Grey bromobutyl rubber stoppers with aluminium seals, in a cardboard box Cardboard box containing 1 vial of 20 ml, 50 ml, 100 ml, 250 ml and 500 ml.

Not all pack sizes may be marketed.

15. Date on which the package leaflet was last revised

<{MM/YYYY}> {<> to be adjusted nationally}

Detailed information on this veterinary medicinal product is available in the <u>Union Product Database</u> (<u>https://medicines.health.europa.eu/veterinary</u>).

16. Contact details

<u>Marketing authorisation holder <and manufacturer responsible for batch release> <and contact details</u> to report suspected adverse reactions>: {<> to be adjusted nationally}

Manufacturer responsible for batch release: TriRx Segré La Grindolière Zone Artisanale Segré 49500 Segré-en-Anjou Bleu France

<<u>Local representatives <and contact details to report suspected adverse reactions></u>:> {<> to be adjusted nationally}

<For any information about this veterinary medicinal product, please contact the local representative of the marketing authorisation holder. {<> to be adjusted nationally}