# ANNEX I SUMMARY OF PRODUCT CHARACTERISTICS

#### 1. NAME OF THE VETERINARY MEDICINAL PRODUCT

Exzolt 10 mg/ml solution for use in drinking water for chickens

### 2. QUALITATIVE AND QUANTITATIVE COMPOSITION

Each ml contains:

#### **Active substance:**

10 mg fluralaner

For the full list of excipients, see section 6.1.

#### 3. PHARMACEUTICAL FORM

Solution for use in drinking water. Light yellow to dark yellow solution.

#### 4. CLINICAL PARTICULARS

#### 4.1 Target species

Chickens (pullets, breeders and layer hens).

### 4.2 Indications for use, specifying the target species

Treatment of poultry red mite (*Dermanyssus gallinae*) infestation in pullets, breeders and layer hens.

#### 4.3 Contraindications

None.

### 4.4 Special warnings for each target species

The following practices should be avoided because they increase the risk of development of resistance and could ultimately result in ineffective therapy:

- too frequent and repeated use of acaricides from the same class, over an extended period of time,
- underdosing, which may be due to underestimation of body weight, misadministration of the product, or lack of calibration of the volume measuring device.

# 4.5 Special precautions for use

#### Special precautions for use in animals

Strict biosecurity measures at house and farm level should be implemented to prevent re-infestation of treated houses. To ensure long term control of the mite populations in a treated house, it is essential to treat any other infested poultry in houses in proximity to the treated one.

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

The veterinary medical product may be slightly irritating to skin and/or eyes.

Avoid contact with skin, eyes and mucous membranes.

Do not eat, drink or smoke while handling the product.

Wash hands and contacted skin with soap and water after use of the product.

In case of eye contact, immediately rinse thoroughly with water.

If the product is spilled, remove any affected clothes.

#### 4.6 Adverse reactions (frequency and seriousness)

None known.

# 4.7 Use during pregnancy, lactation or lay

The safety of the veterinary medicinal product has been demonstrated in layers and breeders. The product can be used during lay.

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

None known.

#### 4.9 Amounts to be administered and administration route

For use in drinking water.

The dose is 0.5 mg fluralaner per kg body weight (equivalent to 0.05 ml of product) administered twice, 7 days apart. The complete course of treatment must be administered for a full therapeutic effect.

If another course of treatment is indicated, the interval between two courses of treatment should be at least 3 months.

Determine the duration of time (between 4 and 24 hours) over which to administer the medicated water on the treatment day. This period of time must be long enough to allow all the birds to receive the required dose. Estimate how much water birds will consume during treatment based on the previous day's water consumption. The product should be added to a volume of water that the chickens will consume in one day. No other source of drinking water should be available during the medication period.

Calculate the volume of product needed based on the total weight of all birds in the house to be treated. To ensure administration of the correct dose, the body weight should be determined as accurately as possible and an accurate measuring device should be used for measuring the calculated volume of the product to be administered.

The required volume of product for each treatment day is calculated from the total body weight (kg) of the entire group of chickens to be treated:

# Volume of product (ml) per treatment day = Total body weight (kg) of chickens to be treated x 0.05 ml/kg

Therefore 500 ml of product treats 10,000 kg body weight (e.g., 5,000 chickens of 2 kg body weight each) per day of treatment administration.

The instructions below need to be followed, in the order described, to prepare the medicated water:

- Check the water system to ensure it works properly and is free of leaks; also ensure that water is available to all nipple or bell drinkers.
- For each day of treatment, medicated water must be freshly prepared.
  - Mix the required volume of the product with water into a large medication tank or create a stock solution in a small container. The stock solution must be further diluted with drinking water and administered over time, using a proportioner or dosing pump. Always add product and water simultaneously in order to avoid foaming. It is important to rinse the measuring device used to measure the required product volume during the filling phase in order to ensure that the complete dose is emptied into the medication tank or the stock solution and

that no residues remain in the measuring device. Stir the stock solution or the content of the medication tank gently until the medicated water is homogeneous. Connect the medication tank or the proportioner or dosing pump to the drinking water system.

- Make sure the dosing pump is properly set to deliver the medicated water during the predetermined treatment period (hours).
- Prime the drinker lines with medicated water and check to see when medicated water has reached the end of the line. This procedure should be repeated on each day of administration.

After each treatment administration, fill the stock solution container with clean (unmedicated) water to rinse the water lines.

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

No adverse reactions were observed following the treatment of 3-week old and adult chickens dosed with up to 5 times the recommended dose for 3 times the recommended duration of treatment. No negative effects on egg production were observed when layer hens were treated with up to 5 times the recommended dose for 3 times the recommended duration of treatment.

There were no adverse effects on reproductive performance when breeding chickens were treated with 3 times the recommended dose for twice the recommended duration of treatment.

# 4.11 Withdrawal period(s)

Meat and offal: 14 days.

Eggs: zero days.

#### 5. PHARMACOLOGICAL PROPERTIES

Pharmacotherapeutic group: Antiparasitic products, ectoparasiticides for systemic use, isoxazolines. ATCvet code: QP53BE02.

#### 5.1 Pharmacodynamic properties

Fluralaner is an acaricide and an insecticide which has a high potency against poultry mites, mostly by exposure via feeding, i.e. it is systemically active against the target parasites.

Fluralaner is a potent inhibitor of parts of the arthropod nervous system by acting antagonistically on ligand-gated chloride channels (GABA-receptor and glutamate-receptor). In molecular on-target studies on insect gamma-aminobutyric acid (GABA) receptors of flea and fly, dieldrin resistance does not affect fluralaner.

The onset of activity against *Dermanyssus gallinae* is within four hours of the mites starting to feed on treated chickens.

The treatment kills mites feeding on treated chickens and stops egg production from female mites for 15 days after the first administration of the product. This activity breaks the mite life cycle.

*In vitro* bio-assays show that fluralaner is effective against parasites having proven field resistance, including organophosphates, pyrethroids and carbamates.

As demonstrated in a multi-site EU field study performed in commercial egg production farms, elimination of mites from infested chickens following treatment is associated with a statistically significant improvement in behavioural parameters indicative of animal welfare (reduction of night-time activity and head scratching, head shaking and preening of own plumage at night and during day-time) as well as a reduction of blood corticosterone concentration.

### 5.2 Pharmacokinetic particulars

After oral administration, fluralaner is absorbed rapidly from the medicated drinking water, reaching maximum plasma concentrations 36 hours after the first dose and 12 hours after the second dose. The bioavailability is high, with approximately 91% of the dose absorbed following oral administration. Fluralaner is highly bound to protein. Fluralaner is widely distributed throughout the body, with the highest concentrations reported in the liver and skin/fat. No significant metabolites are observed in chickens, and fluralaner is mainly eliminated via the hepatic route. The apparent elimination half-life is approximately 5 days following oral administration.

# **Environmental properties**

Fluralaner has been shown to be very persistent in soil under both, aerobic and anaerobic conditions. Fluralaner degrades in aquatic sediment under anaerobic conditions while it has been shown to be very persistent under aerobic conditions.

#### 6. PHARMACEUTICAL PARTICULARS

# 6.1 List of excipients

Alpha-tocopherol (all-*rac*-α-tocopherol) Diethylene glycol monoethyl ether Polysorbate 80

# 6.2 Major incompatibilities

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

#### 6.3 Shelf life

Shelf life of the veterinary medicinal product as packaged for sale: 3 years. Shelf life after first opening the immediate packaging: 1 year. Shelf life of the medicated drinking water: 24 hours.

#### 6.4. Special precautions for storage

This veterinary medicinal product does not require any special storage conditions.

# 6.5 Nature and composition of immediate packaging

Colourless high density polyethylene (HDPE) bottle closed with an aluminium/polyester foil seal and a blue child-resistant polypropylene screw cap (1 litre and 4 litre presentations) or type III amber glass bottle with a white polypropylene/polyethylene (PP/PE) child-proof screw cap with expanded low density PE/aluminium foil/ PE faced liner (50 ml presentation). Pack sizes: bottles of 50 ml, 1 litre or 4 litres. 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

Exzolt should not enter water courses as this may be dangerous for aquatic invertebrates.

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

#### 7. MARKETING AUTHORISATION HOLDER

Intervet International B.V. Wim de Körverstraat 35 5831 AN Boxmeer The Netherlands

# 8. MARKETING AUTHORISATION NUMBER(S)

EU/2/17/212/001-003

# 9. DATE OF FIRST AUTHORISATION/RENEWAL OF THE AUTHORISATION

Date of first authorisation: 18/08/2017

# 10. DATE OF REVISION OF THE TEXT

 $\{DD/MM/YYYY\}$ 

Detailed information on this veterinary medicinal product is available on the website of the European Medicines Agency <a href="http://www.ema.europa.eu/">http://www.ema.europa.eu/</a>.

# PROHIBITION OF SALE, SUPPLY AND/OR USE

Not applicable.

# ANNEX II

- A. MANUFACTURER RESPONSIBLE FOR BATCH RELEASE
- B. CONDITIONS OR RESTRICTIONS REGARDING SUPPLY AND USE
- C. STATEMENT OF THE MRLs

# A. MANUFACTURER RESPONSIBLE FOR BATCH RELEASE

Name and address of the manufacturer responsible for batch release

Intervet Productions S.A. Rue de Lyons 27460 Igoville France

# B. CONDITIONS OR RESTRICTIONS REGARDING SUPPLY AND USE

Veterinary medicinal product subject to prescription.

# C. STATEMENT OF THE MRLs

The active substance in Exzolt is an allowed substance as described in table 1 of the annex to Commission Regulation (EU) No 37/2010:

Pharmacologically active substance	Marker residue	Animal species	MRLs	Target tissues	Other provisions	Therapeutic classification
Fluralaner	Fluralaner	Poultry	65 μg/kg 650 μg/kg	Muscle Skin and fat in natural proportions	NO ENTRY	Antiparasitic agents/Agents against ectoparasites
			650 μg/kg 420 μg/kg 1300 μg/kg	Liver Kidney Eggs		

The excipients listed in section 6.1 of the SPC are allowed substances for which table 1 of the annex to Commission Regulation (EU) No 37/2010 indicates that no MRLs are required or are considered as not falling within the scope of Regulation (EC) No 470/2009 when used as in this veterinary medicinal product.

# ANNEX III LABELLING AND PACKAGE LEAFLET

A. LABELLING

PARTICULARS TO APPEAR ON THE OUTER PACKAGE
CARTON BOX (50-ml presentation only)
1. NAME OF THE VETERINARY MEDICINAL PRODUCT
Exzolt 10 mg/ml solution for use in drinking water for chickens fluralaner
2. STATEMENT OF ACTIVE SUBSTANCES
10 mg/ml fluralaner
3. PHARMACEUTICAL FORM
Solution for use in drinking water
4. PACKAGE SIZE
50 ml
5. TARGET SPECIES
For use in chickens (pullets, breeders and layer hens).
6. INDICATION(S)
7. METHOD AND ROUTE(S) OF ADMINISTRATION
For use in drinking water Read the package leaflet before use.
8. WITHDRAWAL PERIOD(S)
Withdrawal periods: Meat and offal: 14 days Eggs: 0 days
9. SPECIAL WARNING(S), IF NECESSARY

Read the package leaflet before use.

EXP {m	onth/year}
	ened, use within 1 year. uted use within 24 hours.
11. Sl	PECIAL STORAGE CONDITIONS
	PECIAL PRECAUTIONS FOR THE DISPOSAL OF UNUSED PRODUCTS OR VASTE MATERIALS, IF ANY
Read the	e package leaflet before use.
	HE WORDS "FOR ANIMAL TREATMENT ONLY" AND CONDITIONS OR ESTRICTIONS REGARDING SUPPLY AND USE, IF APPLICABLE
For anin	nal treatment only. To be supplied only on veterinary prescription.
14. T	HE WORDS "KEEP OUT OF THE SIGHT AND REACH OF CHILDREN"
Keep ou	t of the sight and reach of children.
15. N	AME AND ADDRESS OF THE MARKETING AUTHORISATION HOLDER
Wim de	International BV Körverstraat 35 N Boxmeer herlands
16. M	ARKETING AUTHORISATION NUMBER(S)
EU/2/17	/212/003
17. M	ANUFACTURER'S BATCH NUMBER
Lot:	

10.

EXPIRY DATE

#### MINIMUM PARTICULARS TO APPEAR ON SMALL IMMEDIATE PACKAGING UNITS

**BOTTLE LABEL** (50-ml presentation only)

### 1. NAME OF THE VETERINARY MEDICINAL PRODUCT

Exzolt 10 mg/ml solution for use in drinking water for chickens fluralaner



# 2. QUANTITY OF THE ACTIVE SUBSTANCE(S)

10 mg/ml fluralaner

# 3. CONTENTS BY WEIGHT, BY VOLUME OR BY NUMBER OF DOSES

50 ml

# 4. ROUTE(S) OF ADMINISTRATION

Solution for use in drinking water

# 5. WITHDRAWAL PERIOD(S)

Withdrawal periods: Meat and offal: 14 days

Eggs: 0 days

# 6. BATCH NUMBER

Lot {number}

# 7. EXPIRY DATE

EXP {month/year}

Once opened, use within 1 year. Once diluted, use within 24 hours.

# 8. THE WORDS "FOR ANIMAL TREATMENT ONLY"

For animal treatment only.

PARTICULARS TO APPEAR ON THE IMMEDIATE PACKAGE
Bottle (1 and 4-litre presentations)
1. NAME OF THE VETERINARY MEDICINAL PRODUCT
Exzolt 10 mg/ml solution for use in drinking water for chickens fluralaner
2. STATEMENT OF ACTIVE SUBSTANCES
10 mg/ml fluralaner
3. PHARMACEUTICAL FORM
Solution for use in drinking water
4. PACKAGE SIZE
1 litre 4 litres
5. TARGET SPECIES
For use in chickens (pullets, breeders and layer hens).
6. INDICATION(S)
7. METHOD AND ROUTE(S) OF ADMINISTRATION
Solution for use in drinking water Read the package leaflet before use.
8. WITHDRAWAL PERIOD(S)
Withdrawal periods: Meat and offal: 14 days. Eggs: zero days.
9. SPECIAL WARNING(S), IF NECESSARY

Read the package leaflet before use.

# 10. EXPIRY DATE

EXP {month/year}

Once opened, use within 1 year.

Once diluted use within 24 hours.

#### 11. SPECIAL STORAGE CONDITIONS

12. SPECIAL PRECAUTIONS FOR THE DISPOSAL OF UNUSED PRODUCTS OR WASTE MATERIALS, IF ANY

Disposal: read package leaflet.

13. THE WORDS "FOR ANIMAL TREATMENT ONLY" AND CONDITIONS OR RESTRICTIONS REGARDING SUPPLY AND USE, IF APPLICABLE

For animal treatment only. To be supplied only on veterinary prescription.

# 14. THE WORDS "KEEP OUT OF THE SIGHT AND REACH OF CHILDREN"

Keep out of the sight and reach of children.

# 15. NAME AND ADDRESS OF THE MARKETING AUTHORISATION HOLDER

Intervet International BV Wim de Körverstraat 35 5831 AN Boxmeer The Netherlands

# 16. MARKETING AUTHORISATION NUMBER(S)

EU/2/17/212/001 (1 litre) EU/2/17/212/002 (4 litres)

# 17. MANUFACTURER'S BATCH NUMBER

Lot {number}

B. PACKAGE LEAFLET

#### **PACKAGE LEAFLET (50-ml presentation):**

# Exzolt 10 mg/ml solution for use in drinking water for chickens

I. NAME AND ADDRESS OF THE MARKETING AUTHORISATION HOLDER AND OF THE MANUFACTURING AUTHORISATION HOLDER RESPONSIBLE FOR BATCH RELEASE, IF DIFFERENT

#### Marketing authorisation holder:

Intervet International BV Wim de Körverstraat 35 5831 AN Boxmeer The Netherlands

# Manufacturer responsible for batch release:

Intervet Productions SA Rue de Lyons 27460 Igoville France

# 2. NAME OF THE VETERINARY MEDICINAL PRODUCT

Exzolt 10 mg/ml solution for use in drinking water for chickens fluralaner

# 3. STATEMENT OF THE ACTIVE SUBSTANCE(S) AND OTHER INGREDIENTS

One ml contains:

### **Active substance:**

Fluralaner 10 mg.

Solution for use in drinking water. Light yellow to dark yellow solution.

# 4. INDICATION(S)

Treatment of poultry red mite (*Dermanyssus gallinae*) infestation in pullets, breeders and layer hens.

#### 5. CONTRAINDICATIONS

None.

#### 6. ADVERSE REACTIONS

None known.

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 inform your veterinary surgeon.

# 7. TARGET SPECIES

Chickens (pullets, breeders and layer hens).

# 8. DOSAGE FOR EACH SPECIES, ROUTE(S) AND METHOD OF ADMINISTRATION

For use in drinking water.

The dose is 0.5 mg fluralaner per kg body weight (equivalent to 0.05 ml of solution) administered twice, 7 days apart. The complete course of treatment must be administered for a full therapeutic effect. If another course of treatment is indicated, the interval between two courses of treatment should be at least 3 months.

# 9. ADVICE ON CORRECT ADMINISTRATION

Determine the duration of time (between 4 and 24 hours) over which to administer the medicated water on the treatment day. This period of time must be long enough to allow all the birds to receive the required dose. Estimate how much water birds will consume during treatment based on the previous day's water consumption. The product should be added to a volume of water that the chickens will consume in one day. No other source of drinking water should be available during the medication period.

Calculate the volume of product needed based on the total weight of all birds to be treated. To ensure administration of the correct dose, the body weight should be determined as accurately as possible and the calculated volume of the product to be administered should be measured as accurately as possible.

The required volume of product for each treatment day is calculated from the total body weight (kg) of the entire group of chickens to be treated:

# Volume of product (ml) per treatment day = Total body weight (kg) of chickens to be treated x 0.05 ml/kg

As an example, 1 ml of product treats 20 kg body weight (e.g., 10 chickens of 2 kg body weight each) per day of administration. A full treatment consists of two administrations, 7 days apart.

The instructions below need to be followed to prepare the medicated water:

- Check that the water system functions properly and is free of leaks
- For each day of treatment, medicated water must be freshly prepared.
  - Mix the required volume of the product with the determined amount of water in a measuring device.
  - o Add product and water simultaneously in order to avoid foaming.
  - o Stir stock solution gently but thoroughly until the medicated water is homogeneous.
  - o It is important to rinse the measuring device to ensure that the complete dose is provided to the chickens and that no residues remain. Add the rinse water to the drinkers.
  - o Ensure that medicated water is evenly divided to all drinkers.

# 10. WITHDRAWAL PERIOD(S)

Meat and offal: 14 days.

Eggs: zero days.

#### 11. SPECIAL STORAGE PRECAUTIONS

Keep out of the sight and reach of children.

This veterinary medicinal product does not require any special storage conditions.

Do not use this veterinary medicinal product after the expiry date which is stated on the label after

Shelf life after first opening the container: 1 year.

Shelf life after dilution according to directions: 24 hours.

#### 12. **SPECIAL WARNING(S)**

# Special warnings for each target species:

The following practices should be avoided because they increase the risk of development of resistance and could ultimately result in ineffective therapy:

- too frequent and repeated use of acaricides from the same class, over an extended period of time
  underdosing, which may be due to underestimation of body weight, misadministration of the product, or lack of calibration of the volume measuring device.

#### Special precautions for use in animals:

To ensure long term control of the mite populations in a flock, suitable measures should be implemented to prevent re-infestation of the treated flock. It is essential to avoid any contact to potentially infested birds and to treat any other infested poultry in flocks in proximity to the treated one.

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

The veterinary medicinal product may be slightly irritating to skin and/or eyes.

Avoid contact with skin, eyes and mucous membranes.

Do not eat, drink or smoke while handling the product.

Wash hands and contacted skin with soap and water after use of the product.

In case of eye contact, immediately rinse thoroughly with water.

If the product is spilled, remove any affected clothes.

#### Fertility and lay:

The safety of the veterinary medicinal product has been demonstrated in layers and breeders. The product can be used during lay.

#### Overdose (symptoms, emergency procedures, antidotes):

Safety was demonstrated in 3-week-old and adult chickens treated with overdoses of up to 5 times the recommended dose for 3 times the recommended duration of treatment.

No negative effects on egg production were observed when layer hens were treated with overdoses of up to 5 times the recommended dose for 3 times the recommended duration of treatment.

There were no adverse effects on reproductive performance when breeding chickens were treated with overdoses of 3 times the recommended dose for twice the recommended duration of treatment.

### Incompatibilities:

In the absence of compatibility studies, do not mix this veterinary medicinal product with other veterinary medicinal products.

#### 13. SPECIAL PRECAUTIONS FOR THE DISPOSAL OF UNUSED PRODUCT OR WASTE **MATERIALS, IF ANY**

Exzolt should not enter water courses as this may be dangerous for aquatic invertebrates.

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

Ask your veterinary surgeon how to dispose of medicines no longer required. These measures should help to protect the environment.

# 14. DATE ON WHICH THE PACKAGE LEAFLET WAS LAST APPROVED

# DD/MM/YYYY

Detailed information on this veterinary medicinal product is available on the website of the European Medicines Agency <a href="http://www.ema.europa.eu/">http://www.ema.europa.eu/</a>.

# 15. OTHER INFORMATION

Bottle of 50 ml, 1 litre or 4 litres. Not all pack sizes may be marketed.

# **Environmental properties:**

Fluralaner has been shown to be very persistent in soil under both, aerobic and anaerobic conditions. Fluralaner degrades in aquatic sediment under anaerobic conditions while it has been shown to be very persistent under aerobic conditions.

# PACKAGE LEAFLET (1- and 4-litre presentations): Exzolt 10 mg/ml solution for use in drinking water for chickens

# 1. NAME AND ADDRESS OF THE MARKETING AUTHORISATION HOLDER AND OF THE MANUFACTURING AUTHORISATION HOLDER RESPONSIBLE FOR BATCH RELEASE, IF DIFFERENT

# Marketing authorisation holder:

Intervet International BV Wim de Körverstraat 35 5831 AN Boxmeer The Netherlands

# Manufacturer responsible for batch release:

Intervet Productions SA Rue de Lyons 27460 Igoville France

# 2. NAME OF THE VETERINARY MEDICINAL PRODUCT

Exzolt 10 mg/ml solution for use in drinking water for chickens fluralaner

# 3. STATEMENT OF THE ACTIVE SUBSTANCE AND OTHER INGREDIENTS

One ml contains:

**Active substance:** 

Fluralaner 10 mg.

Solution for use in drinking water. Light yellow to dark yellow solution.

# 4. INDICATION(S)

Treatment of poultry red mite (*Dermanyssus gallinae*) infestation in pullets, breeders and layer hens.

#### 5. CONTRAINDICATIONS

None.

# 6. ADVERSE REACTIONS

None known.

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 inform your veterinary surgeon.

#### 7. TARGET SPECIES

Chickens (pullets, breeders and layer hens).

# 8. DOSAGE FOR EACH SPECIES, ROUTE(S) AND METHOD OF ADMINISTRATION

For use in drinking water.

The dose is 0.5 mg fluralaner per kg body weight (equivalent to 0.05 ml of solution) administered twice, 7 days apart. The complete course of treatment must be administered for a full therapeutic effect. If another course of treatment is indicated, the interval between two courses of treatment should be at least 3 months.

#### 9. ADVICE ON CORRECT ADMINISTRATION

Determine the duration of time (between 4 and 24 hours) over which to administer the medicated water on the treatment day. This period of time must be long enough to allow all the birds to receive the required dose. Estimate how much water birds will consume during treatment based on the previous day's water consumption. The product should be added to a volume of water that the chickens will consume in one day. No other source of drinking water should be available during the medication period.

Calculate the volume of product needed based on the total weight of all birds in the house to be treated. To ensure administration of the correct dose, the body weight should be determined as accurately as possible and an accurate measuring device should be used for measuring the calculated volume of the product to be administered.

The required volume of product for each treatment day is calculated from the total body weight (kg) of the entire group of chickens to be treated:

# Volume of product (ml) per treatment day = Total body weight (kg) of chickens to be treated x 0.05 ml/kg

Therefore 500 ml of product treats 10,000 kg body weight (e.g., 5,000 chickens of 2 kg body weight each) per day of treatment administration.

The instructions below need to be followed, in the order described, to prepare the medicated water:

- Check the water system to ensure it works properly and is free of leaks; also ensure that water is available to all nipple or bell drinkers.
- For each day of treatment, medicated water must be freshly prepared.
  - Mix the required volume of the product with water into a large medication tank or create a stock solution in a small container. The stock solution must be further diluted with drinking water and administered over time, using a proportioner or dosing pump. Always add product and water simultaneously in order to avoid foaming. It is important to rinse the measuring device used to measure the required product volume during the filling phase in order to ensure that the complete dose is emptied into the medication tank or the stock solution and that no residues remain in the measuring device. Stir the stock solution or the content of the medication tank gently until the medicated water is homogeneous. Connect the medication tank or the proportioner or dosing pump to the drinking water system.
- Make sure the dosing pump is properly set to deliver the medicated water during the predetermined treatment period (hours).
- Prime the drinker lines with medicated water and check to see when medicated water has reached the end of the line. This procedure should be repeated on each day of administration.

After each treatment administration, fill the stock solution container with clean (unmedicated) water to rinse the water lines.

# 10. WITHDRAWAL PERIOD(S)

Meat and offal: 14 days.

Eggs: zero days.

#### 11. SPECIAL STORAGE PRECAUTIONS

Keep out of the sight and reach of children.

This veterinary medicinal product does not require any special storage conditions.

Do not use this veterinary medicinal product after the expiry date which is stated on the label after EXP.

Shelf life after first opening the container: 1 year.

Shelf life after dilution according to directions: 24 hours.

# 12. SPECIAL WARNINGS

#### Special warnings for each target species:

The following practices should be avoided because they increase the risk of development of resistance and could ultimately result in ineffective therapy:

- too frequent and repeated use of acaricides from the same class, over an extended period of time
- underdosing, which may be due to underestimation of body weight, misadministration of the product, or lack of calibration of the volume measuring device.

#### Special precautions for use in animals:

Strict biosecurity measures at house and farm level should be implemented to prevent re-infestation of treated houses. To ensure long term control of the mite populations in a treated house, it is essential to treat any other infested poultry in houses in proximity to the treated one.

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

The veterinary medicinal product may be slightly irritating to skin and/or eyes.

Avoid contact with skin, eyes and mucous membranes.

Do not eat, drink or smoke while handling the product.

Wash hands and contacted skin with soap and water after use of the product.

In case of eye contact, immediately rinse thoroughly with water.

If the product is spilled, remove any affected clothes.

# Fertility and lay:

The safety of the veterinary medicinal product has been demonstrated in layers and breeders. The product can be used during lay.

#### Overdose (symptoms, emergency procedures, antidotes):

Safety was demonstrated in 3-week-old and adult chickens treated with overdoses of up to 5 times the recommended dose for 3 times the recommended duration of treatment.

No negative effects on egg production were observed when layer hens were treated with overdoses of up to 5 times the recommended dose for 3 times the recommended duration of treatment.

There were no adverse effects on reproductive performance when breeding chickens were treated with overdoses of 3 times the recommended dose for twice the recommended duration of treatment.

#### Incompatibilities:

In the absence of compatibility studies, do not mix this veterinary medicinal product with other veterinary medicinal products.

# 13. SPECIAL PRECAUTIONS FOR THE DISPOSAL OF UNUSED PRODUCT OR WASTE MATERIALS, IF ANY

Exzolt should not enter water courses as this may be dangerous for aquatic invertebrates.

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

Ask your veterinary surgeon how to dispose of medicines no longer required. These measures should help to protect the environment.

# 14. DATE ON WHICH THE PACKAGE LEAFLET WAS LAST APPROVED

#### DD/MM/YYYY

Detailed information on this veterinary medicinal product is available on the website of the European Medicines Agency <a href="http://www.ema.europa.eu/">http://www.ema.europa.eu/</a>.

# 15. OTHER INFORMATION

Bottle of 50 ml, 1 litre or 4 litres. Not all pack sizes may be marketed.

#### Environmental properties:

Fluralaner has been shown to be very persistent in soil under both, aerobic and anaerobic conditions. Fluralaner degrades in aquatic sediment under anaerobic conditions while it has been shown to be very persistent under aerobic conditions.