# ANNEX I SUMMARY OF PRODUCT CHARACTERISTICS

## 1. NAME OF THE VETERINARY MEDICINAL PRODUCT

Dolovet vet 160 mg/g oral powder for cattle

In Austria and Hungary: Rifen 160 mg/g oral powder for cattle

## 2. QUALITATIVE AND QUANTITATIVE COMPOSITION

## **Active substance:**

ketoprofen 160 mg/g

## **Excipients:**

Qualitative composition of excipients and other constituents	
Maltodextrin	
Carmellose sodium	

White or yellowish white powder.

## 3. CLINICAL INFORMATION

## 3.1 Target species

Cattle.

## 3.2 Indications for use for each target species

Alleviation of inflammation and reduction of fever in individual animals.

## 3.3 Contraindications

Do not use in cases of hypersensitivity to the active substance, any of the excipients or any other non-steroid anti-inflammatory (NSAID) drugs. Do not use in cases of gastrointestinal ulcers or severe renal insufficiency, coagulation disorders or severe hypovolemia.

## 3.4 Special warnings

None.

## 3.5 Special precautions for use

Special precautions for safe use in the target species:

The recommended dose and treatment time must not be exceeded. Do not use in animals which have completely lost their appetite because this could lead to insufficient absorption of ketoprofen.

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

People with known hypersensitivity to non-steroidal anti-inflammatory drugs (NSAID) should avoid contact with the veterinary medicinal product. Due to the risk of sensitization direct contact of this veterinary medicinal product to skin, eyes and mucous membranes should be avoided.

Personal protective equipment consisting of gloves, goggles and a face mask should be worn when handling the veterinary medicinal product. Wash contaminated areas immediately. Wash hands after use. Please notice that this veterinary medicinal product has a high concentration of the active ingredient and accidental ingestion can result in a serious intoxication in humans.

Special precautions for the protection of the environment:

Not applicable.

#### 3.6 Adverse events

Cattle.

Very rare	Diarrhoea, gastrointestinal irritation, gastric ulceration
(<1 animal / 10,000 animals treated,	Diarrioca, gastrointestinai irritation, gastrie diceration
including isolated reports):	

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. Seethe package leaflet for respective contact details.

## 3.7 Use during pregnancy, lactation or lay

## Pregnancy:

No teratogenic or embryotoxic effects in laboratory animals with the recommended dose of ketoprofen has been recorded. No such studies have been conducted with cattle. The induction of parturition in laboratory animals has been found to be delayed when ketoprofen was given just before parturition. Therefore, the use of the veterinary medicinal product in cattle close to parturition should be avoided.

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

Other non-steroidal anti-inflammatory drugs (NSAID) must not be used simultaneously with the veterinary medicinal product and within 24 hours after the last dose of Dolovet because the substances may compete in binding with proteins thus leading to toxic effects. Simultaneous use of glucocorticoids may add undesirable effects on GI-canal. Simultaneous use of loop-diuretics (for example furosemid) may decrease the effect of the diuretic.

## 3.9 Administration routes and dosage

Oral use.

The recommended dose is 4 mg ketoprofen per kg body weight once daily for 1-3 days.

**Individual sachets:** For adult cattle weighing 600 kg bw.: One sachet of 15 g once daily for 1 - 3 days.

**Multidose container:** The package contains a dosage spoon. One level spoonful contains 4 g and is the correct dose for 160 kg:

	Number of spoonfuls
Weight of the animal (kg)	(one level spoonful contains 4 g)
400	2 1/2
480	3
560	3 1/2
640	4
720	4 1/2

The powder should be mixed with water e.g. in a bottle using ½ litre of water, shaken well and administered immediately per orally.

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

Ketoprofen may cause adverse reactions typical to non-steroidal anti-inflammatory drugs, such as diarrhoea which is caused by gastro-intestinal irritation and ulceration. There is no specific antidote. In cases of overdose symptomatic therapy should be given.

# 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: 1 day. Milk: zero days.

#### 4. PHARMACOLOGICAL INFORMATION

## **4.1 ATCvet code:** QM01AE03

## 4.2 Pharmacodynamics

Ketoprofen is a non-steroid anti-inflammatory drug (NSAID) with anti-inflammatory, antipyretic and analgesic effect. The anti-inflammatory action of ketoprofen is based on the inhibition of cyclo-oxygenase and lipo-oxygenase enzymes. The blocking of cyclo-oxygenase enzyme inhibits the formation of the inflammation mediators  $PGE_2$  and  $PGI_2$ . The inhibition of lipo-oxygenase enzyme reduces the synthesis of leucotriens. Ketoprofen inhibits the secretion of bradykinin, which is a chemical mediator of pain and inflammation. Ketoprofen has been documented to stabilise lysosomal cell membranes. Ketoprofen has been shown to inhibit the intravenously injected E.coli endotoxin induced tromboxane B2 production in the bovine.

## 4.3 Pharmacokinetics

In cattle, after the recommended dose of 4 mg/kg of ketoprofen per os before feeding the concentrate, the highest concentration of ketoprofen in plasma ( $C_{max}3.9~\mu g/ml$ ) was achieved in about 2 hours. The variation between individual cows was 1-3 hours.

The elimination half-life after per oral administration was about 4.5 hours. Concentrations over  $0.1~\mu g$ /ml in plasma were measured 24 hours after the administration of the drug. The anti-inflammatory effect in tissues has been documented to continue even after the plasma concentration has decreased. The bioavailability after per-oral dosing is about 76 %.

## 5. PHARMACEUTICAL PARTICULARS

## 5.1 Major incompatibilities

None known.

## 5.2 Shelf life

Shelf life of the veterinary medicinal product as packaged for sale: Individual sachets 3 years.

Multidose container 3 years.

Shelf life after first opening the immediate packaging of multidose container: 1 year.

## **5.3** Special precautions for storage

Individual sachets: This veterinary medicinal product does not require any special storage conditions. Multidose container: Keep the opened multidose container tightly closed. Store the opened container in a dry place below 25 °C.

## 5.4 Nature and composition of immediate packaging

Individual sachets: 15 g aluminium-laminate sachets, which are further packed to a cardboard box.  $3 \times 15 \text{ g}$ .

Multidose containers 1 kg and 250 g: a white 2 litre (1 kg) or 500 ml (250 g) HDPE container with a white plastic (LDPE) closure packed in a cardboard box. Package includes a 4 g polypropylene dosing spoon with imprint "4 G".

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.

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

Vetcare Oy

## 7. MARKETING AUTHORISATION NUMBER(S)

XXXXXX (national information)

#### 8. DATE OF FIRST AUTHORISATION

Date of first authorisation: DD/MM/YYYY (national information)

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

DD/MM/YYYY (national information)

## 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> (<a href="https://medicines.health.europa.eu/veterinary">https://medicines.health.europa.eu/veterinary</a>).

# ANNEX III LABELLING AND PACKAGE LEAFLET

A. LABELLING

PARTICULARS TO APPEAR ON THE OUTER PACKAGE	
Cardboard box for individual sachets	
1. NAME OF THE VETERINARY MEDICINAL PRODUCT	
Dolovet vet 160 mg/g oral powder for cattle	
2. STATEMENT OF ACTIVE SUBSTANCES	
ketoprofen.	
3. PACKAGE SIZE	
3 x 15 g	
4. TARGET SPECIES	
Cattle	
5. INDICATIONS	
6. ROUTES OF ADMINISTRATION	
Oral use.	
7. WITHDRAWAL PERIODS	
Withdrawal period:  Meat and offal: 1 day.  Milk: zero days.	
8. EXPIRY DATE	
Exp. {mm/yyyy}	
9. SPECIAL STORAGE PRECAUTIONS	
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	

Vetcare Oy

## 14. MARKETING AUTHORISATION NUMBERS

XXXXXX

## 15. BATCH NUMBER

Lot {number}

PARTICULARS TO APPEAR ON THE OUTER PACKAGE	
Cardboard box for 250 g and 1 kg HDPE containers	
1. NAME OF THE VETERINARY MEDICINAL PRODUCT	
Dolovet vet 160 mg/g oral powder for cattle	
2. STATEMENT OF ACTIVE SUBSTANCES	
ketoprofen.	
3. PACKAGE SIZE	
250g 1 kg The cardboard box includes a dosing spoon of 4 g.	
4. TARGET SPECIES	
Cattle.	
5. INDICATIONS	
6. ROUTES OF ADMINISTRATION	
Oral use.	
7. WITHDRAWAL PERIODS	
Withdrawal period:  Meat and offal: 1 day.  Milk: zero days.	
8. EXPIRY DATE	
Exp. {mm/yyyy}	
9. SPECIAL STORAGE PRECAUTIONS	
(given in the immediate label)	
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.	

13.	NAME OF THE MARKETING AUTHORISATION HOLDER	
Vetc	care Oy	
	•	
14.	MARKETING AUTHORISATION NUMBERS	
XXX	XXXX	
15.	BATCH NUMBER	

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

12.

PARTICULARS TO APPEAR ON THE IMMEDIATE PACKAGE		
Label for 250 g and 1 kg HDPE container		
1. NAME OF THE VETERINARY MEDICINAL PRODUCT		
Dolovet vet 160 mg/g oral powder for cattle		
2. STATEMENT OF ACTIVE SUBSTANCES		
ketoprofen.		
3. TARGET SPECIES		
Cattle.		
4. ROUTES OF ADMINISTRATION		
Read the package leaflet before use.		
5. WITHDRAWAL PERIODS		
Withdrawal period:  Meat and offal: 1 day.  Milk: zero days.		
6. EXPIRY DATE		
Exp. {mm/yyyy}  Shelf life after first opening: 1 year Once opened, use by		
7. SPECIAL STORAGE PRECAUTIONS		
Keep the opened multidose container tightly closed. Store the opened container in a dry place below 25 °C.		
8. NAME OF THE MARKETING AUTHORISATION HOLDER		
Vetcare Oy		
9. BATCH NUMBER		
Lot {number}		

MI	MINIMUM PARTICULARS TO APPEAR ON SMALL IMMEDIATE PACKAGING UNITS		
Sac	Sachet		
1.	NAME OF THE VETERINARY MEDICINAL PRODUCT		

Dolovet vet 160 mg/g oral powder for cattle

## 2. QUANTITATIVE PARTICULARS OF THE ACTIVE SUBSTANCES

1 sachet (15 g) contains 2.4 g ketoprofen.

## 3. BATCH NUMBER

Lot {number}

## 4. EXPIRY DATE

Exp. {mm/yyyy}

**B. PACKAGE LEAFLET** 

## PACKAGE LEAFLET

## 1. Name of the veterinary medicinal product

Dolovet vet 160 mg/g oral powder for cattle

## 2. Composition

Active substance: ketoprofen 160 mg/g.

1 sachet (15 g) powder contains 2.4 g ketoprofen and excipients to 15 g.

Dolovet is white or yellowish white powder.

## 3. Target species

Cattle.

#### 4. Indications for use

Alleviation of inflammation and reduction of fever in individual animals.

## 5. Contraindications

Do not use in cases of hypersensitivity to the active substance, any of the excipients or other non-steroid anti-inflammatory (NSAID) drugs.

Do not use in cases of gastrointestinal ulcers or severe renal insufficiency, coagulation disorders or severe hypovolemia.

## 6. Special warnings

## Special precautions for safe use in the target species:

The induction of parturition can be delayed when ketoprofen is given just before parturition. Therefore, the use of the veterinary medicinal product in cattle close to parturition should be avoided. Do not use in animals which have completely lost their appetite because this could lead to insufficient absorption of ketoprofen.

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

Personal protective equipment consisting of gloves, goggles and a face mask should be worn when handling the veterinary medicinal product. Wash contaminated areas immediately. Wash hands after use. Please notice that this veterinary medicinal product has a high concentration of the active ingredient and accidental ingestion can result in a serious intoxication in humans.

## <u>Interaction with other medicinal products and other forms of interaction:</u>

Other non-steroidal anti-inflammatory drugs (NSAID) must not be used simultaneously with the veterinary medicinal product and within 24 hours after the last dose of Dolovet, because the substances may compete in binding with proteins thus leading to toxic effects. Simultaneous use of loop-diuretics (for example furosemid) may decrease the effect of the diuretic.

#### Pregnancy:

No teratogenic or embryotoxic effects in laboratory animals with the recommended dose of ketoprofen has been recorded. No such studies have been conducted with cattle. The induction of parturition in laboratory animals has been found to be delayed when ketoprofen was given just before parturition. Therefore, the use of the veterinary medicinal product in cattle close to parturition should be avoided.

## Overdose:

Ketoprofen may cause adverse reactions typical to non-steroidal anti-inflammatory drugs, such as diarrhoea which is caused by gastro-intestinal irritation and ulceration. There is no specific antidote. In cases of overdose symptomatic therapy should be given.

## 7. Adverse events

#### Cattle.

Very rare	
(<1 animal / 10,000 animals treated,	Diarrhoea, gastrointestinal irritation, gastric ulceration
including isolated reports):	

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.

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

Oral use.

The recommended dose is 4 mg ketoprofen per kg body weight once daily for 1-3 days.

**Individual sachets:** For adult cattle weighing 600 kg bw.: One sachet of 15 g once daily for 1 - 3 days.

**Multidose container**: The package contains a dosing spoon. One level spoonful contains 4 g and is the correct dose for 160 kg:

	Number of spoonfuls
Weight of the animal (kg)	(one level spoonful contains 4 g)
400	2 1/2
480	3
560	3 1/2
640	4
720	4 1/2

## 9. Advice on correct administration

The powder should be mixed with water e.g. in a bottle using ½ litre of water, shaken well and administered immediately per orally.

## 10. Withdrawal periods

Meat and offal: 1 day.

Milk: zero days.

## 11. Special storage precautions

Keep out of the sight and reach of children.

Do not use this veterinary medicinal product after the expiry date which is stated on the sachet, label or carton after Exp. The expiry date refers to the last day of that month.

Individual sachets: this veterinary medicinal product does not require any special storage conditions. Multidose container: keep the opened multidose container tightly closed. Store the opened container in a dry place below 25 °C.

## 12. Special precautions for disposal

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

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.

## 13. Classification of veterinary medicinal products

Veterinary medicinal product subject to prescription.

## 14. Marketing authorisation numbers and pack sizes

#### XXXXX

Pack sizes:

Individual sachets: 15 g aluminium-laminate sachets, which are further packed to a cardboard box.  $3 \times 15 \text{ g}$ .

Multidose containers 1 kg and 250 g: a white 2 litre (1 kg) or 500 ml (250 g) HDPE container with a white plastic (LDPE) closure packed in a cardboard box. Package includes a 4 g polypropylene dosing spoon with imprint "4 G".

Not all pack sizes may be marketed.

## 15. Date on which the package leaflet was last revised

## DD/MM/YYYY

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

## 16. Contact details

Marketing authorisation holder: Vetcare Oy, P.O. Box 99, 2401 Salo, Finland

<u>Manufacturer responsible for batch release</u>: Galena Pharma Oy, P.O. Box 1450, 70501 Kuopio, Finland

For any information about this veterinary medicinal product, please contact the local representative of the marketing authorisation holder.

## 17. Other information