

**ANNEX I**  
**SUMMARY OF PRODUCT CHARACTERISTICS**

## 1. NAME OF THE VETERINARY MEDICINAL PRODUCT

Zulvac BTV suspension for injection for sheep and cattle

## 2. QUALITATIVE AND QUANTITATIVE COMPOSITION

**Each dose of 2 ml contains** (BTV-1, BTV-4, BTV-8 in sheep; BTV-1, BTV-8 in cattle):

**Each dose of 4 ml contains** (BTV-4 in cattle):

### Active substances:

One of the following inactivated bluetongue virus strains.

Inactivated bluetongue virus, serotype 1, strain BTV-1/ALG2006/01 E1	RP* $\geq$ 1	n.a.
Inactivated bluetongue virus, serotype 8, strain BTV-8/BEL2006/02	RP* $\geq$ 1	n.a.
Inactivated bluetongue virus, serotype 4, strain SPA-1/2004	RP* $\geq$ 0.8	RP* $\geq$ 0.8

n.a.: not applicable

\*Relative potency by a mice potency test compared to a reference vaccine efficacious in sheep and/or cattle.

The type of strain included in the final product will be adapted to the current epidemiological situation at the time of formulation of the final product and will be shown on the label. The target species will also be shown on the label.

### Adjuvants:

Al <sup>3+</sup> (as hydroxide)	4 mg	8 mg
Quil-A ( <i>Quillaja saponaria</i> saponin extract)	0.4 mg	0.8 mg

### Excipients:

Qualitative composition of excipients and other constituents	Quantitative composition if that information is essential for proper administration of the veterinary medicinal product	
	Each dose of 2 ml contains (BTV-1, BTV-4, BTV-8 in sheep; BTV-1, BTV-8 in cattle):	Each dose of 4 ml contains (BTV-4 in cattle):
Thiomersal	0.2 mg	0.4 mg
Potassium chloride		
Potassium dihydrogen phosphate		
Disodium phosphate dihydrate		
Sodium chloride		
Water for injections		

Off-white or pink liquid.

### 3. CLINICAL INFORMATION

#### 3.1 Target species

Sheep and cattle.

#### 3.2 Indications for use for each target species

##### Sheep:

Active immunisation of sheep from 6 weeks of age for the prevention\* of viraemia caused by bluetongue virus, serotype 1 or serotype 8.

Active immunisation of sheep from 6 weeks of age for the reduction\* of viraemia caused by bluetongue virus, serotype 4.

\*Below the level of detection of  $< 3.9 \log_{10}$  genome copies/ml by the validated RT-qPCR method, indicating no presence of viral genome.

Onset of immunity: 3 weeks after completion of the primary vaccination scheme.

Duration of immunity: 1 year after completion of the primary vaccination scheme.

##### Cattle:

Active immunisation of cattle from 12 weeks of age for the prevention\*\* of viraemia caused by bluetongue virus, serotype 1, serotype 4 or serotype 8.

\*\*Below the level of detection of  $< 3.4 \log_{10}$  genome copies/ml by a validated RT-qPCR method, indicating no presence of viral genome.

Onset of immunity:           Bluetongue virus, serotype 1: 15 days after completion of the primary vaccination scheme.  
                                  Bluetongue virus, serotype 8: 25 days after completion of the primary vaccination scheme.  
                                  Bluetongue virus, serotype 4: 14 days after completion of the primary vaccination scheme.

Duration of immunity:       Bluetongue virus, serotype 1: 1 year after completion of the primary vaccination scheme.  
                                  Bluetongue virus, serotype 8: 1 year after completion of the primary vaccination scheme.  
                                  Bluetongue virus, serotype 4: 6 months after completion of the primary vaccination scheme.

There is evidence of BTV-1 seroneutralising antibodies indicative of protection for up to 21 months after primary vaccination.

#### 3.3 Contraindications

None.

#### 3.4 Special warnings

Vaccinate healthy animals only.

No information is available on the use of the vaccine in seropositive animals including those with maternally derived antibodies.

If used in other domestic and wild ruminant species that are considered at risk of infection, its use in these species should be undertaken with care and it is advisable to test the vaccine on a small number of animals prior to mass vaccination. The level of efficacy for other species may differ from that observed in sheep and cattle.

### 3.5 Special precautions for use

Special precautions for safe use in the target species:

Not applicable.

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

Not applicable.

Special precautions for the protection of the environment:

Not applicable.

### 3.6 Adverse events

**Sheep:**

Very common (>1 animal / 10 animals treated):	Elevated temperature <sup>1</sup> Injection site swelling <sup>2</sup> Injection site nodule <sup>3</sup>
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<sup>1</sup>Transient, not exceeding 1.6 °C, observed during the 48 hours following vaccination.

<sup>2</sup>Diffuse swelling, persisting for not more than 7 days.

<sup>3</sup>Palpable granuloma, up to a size of 60 cm<sup>2</sup>, decreasing in size over time but possibly persisting for more than 50 days.

**Cattle administered a 2 ml dose:**

Very common (>1 animal / 10 animals treated):	Injection site reaction <sup>1</sup>
Common (1 to 10 animals / 100 animals treated):	Elevated temperature <sup>2</sup>

<sup>1</sup>Local reactions of up to 5 cm diameter were very commonly observed and reactions > 5 cm diameter were commonly observed. These resolved within a maximum of 25 days. Local reactions may increase slightly following the second dose, in this case lasting up to 15 days.

<sup>2</sup>Transient, not exceeding 2.7 °C, observed during the 48 hours following vaccination.

**Cattle administered a 4 ml dose:**

Very common (>1 animal / 10 animals treated):	Injection site reaction <sup>1</sup> Elevated temperature <sup>2</sup>
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<sup>1</sup>Up to 6 cm in diameter, resolved in a maximum of 8 days.

<sup>2</sup>Transient, not exceeding 2.7 °C, observed within the 48 hours following vaccination with a maximum duration of 2 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:

Can be used during pregnancy.

#### Lactation:

The safety of the veterinary medicinal product has not been established during lactation in sheep. Can be used during lactation in cattle.

#### Fertility:

The safety and the efficacy of the veterinary medicinal product have not been established in breeding males. In this category of animals, the vaccine should be used only according to the benefit-risk assessment by the responsible veterinarian and/or national competent authorities on the current vaccination policies against bluetongue virus (BTV).

### **3.8 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.

### **3.9 Administration routes and dosage**

#### Sheep:

Subcutaneous use.

#### Primary vaccination:

Administer two doses of 2 ml according to the following vaccination scheme:

- 1<sup>st</sup> dose: from 6 weeks of age.
- 2<sup>nd</sup> dose: after 3 weeks.

#### Re-vaccination scheme:

For protection against serotype 1 or serotype 8, administer one dose of 2 ml, every year.

For protection against serotype 4, administer two doses of 2 ml three weeks apart, every year.

#### Cattle:

Intramuscular use.

#### For protection against serotype 1 and serotype 8:

#### Primary vaccination:

Administer two doses of 2 ml according to the following vaccination scheme:

- 1<sup>st</sup> dose: from 12 weeks of age.
- 2<sup>nd</sup> dose: after 3 weeks.

#### Re-vaccination scheme:

For protection against serotype 1, administer one dose of 2 ml, every year.

For protection against serotype 8, administer two doses of 2 ml three weeks apart, every year.

#### For protection against serotype 4:

#### Primary vaccination:

Administer two doses of 4 ml according to the following vaccination scheme:

- 1<sup>st</sup> dose: from 12 weeks of age.
- 2<sup>nd</sup> dose: after 3 weeks.

#### Re-vaccination scheme:

Administer two doses of 4 ml three weeks apart, every 6 months.

#### Method of administration (sheep and cattle):

Apply usual aseptic procedures.

Shake gently immediately before use.

Avoid bubble formation, as this can be irritating at the site of injection.

The entire content of the bottle should be used immediately after broaching and during the same procedure.

In order to avoid accidental contamination of the vaccine during use, it is recommended to use a multi-injection type vaccination system when larger dose presentations are used.

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

#### Sheep:

After administration with a 2-fold overdose (4 ml), reactions in sheep are similar to those seen after administration of a single dose, but injection site reactions may persist for a longer time (general swelling at the injection site persisting for not more than 9 days or subcutaneous granuloma possibly persisting for more than 63 days).

#### Cattle:

A transient increase in rectal temperature, not exceeding 2 °C, may occur in 10% of the animals during the 24 hours following administration of a 2-fold overdose.

### **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**

Any person intending to manufacture, import, possess, distribute, sell, supply and use this veterinary medicinal product must first consult the relevant Member State's competent authority on the current vaccination policies, as these activities may be prohibited in a Member State on the whole or part of its territory pursuant to national legislation.

### **3.12 Withdrawal periods**

Zero days.

## **4. IMMUNOLOGICAL INFORMATION**

### **4.1 ATCvet code: QI02AA08**

To stimulate active immunity of sheep and cattle against bluetongue virus serotype(s) related to those contained in the vaccine.

## **5. PHARMACEUTICAL PARTICULARS**

### **5.1 Major incompatibilities**

Do not mix with any other veterinary medicinal product.

### **5.2 Shelf life**

Shelf life of the veterinary medicinal product as packaged for sale: 1 year (Bluetongue virus, serotype 1 and serotype 8) or 18 months (Bluetongue virus, serotype 4).

Shelf life after first opening the immediate packaging: use immediately.

### **5.3 Special precautions for storage**

Store and transport refrigerated (2 °C – 8 °C).

Do not freeze.

Protect from light.

### **5.4 Nature and composition of immediate packaging**

High density polyethylene (HDPE) bottles of 20, 100 or 240 ml with chlorobutyl elastomer stopper and aluminium seal.

#### Pack sizes:

Cardboard box with 1 bottle of 10 doses of 2 ml or 5 doses of 4 ml (20 ml).

Cardboard box with 1 bottle of 50 doses of 2 ml or 25 doses of 4 ml (100 ml).

Cardboard box with 1 bottle of 120 doses of 2 ml or 60 doses of 4 ml (240 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.

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**

Zoetis Belgium

## **7. MARKETING AUTHORISATION NUMBER(S)**

EU/2/17/207/001–009

## **8. DATE OF FIRST AUTHORISATION**

Date of first authorisation: 25/04/2017.

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

{DD/MM/YYYY}

**10. CLASSIFICATION OF VETERINARY MEDICINAL PRODUCTS**

Veterinary medicinal product subject to prescription.

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



**ANNEX II**

**OTHER CONDITIONS AND REQUIREMENTS OF THE MARKETING AUTHORISATION**

None.

**ANNEX III**  
**LABELLING AND PACKAGE LEAFLET**

## **A. LABELLING**

**PARTICULARS TO APPEAR ON THE OUTER PACKAGE**

**CARDBOARD BOX BTV-1 for sheep and cattle**

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

Zulvac BTV Suspension for injection.

**2. STATEMENT OF ACTIVE SUBSTANCES**

Each dose of 2 ml contains:  
Inactivated BTV, serotype 1.

**3. PACKAGE SIZE**

20 ml (10 doses)  
100 ml (50 doses)  
240 ml (120 doses)

**4. TARGET SPECIES**

Sheep and cattle.

**5. INDICATIONS**

**6. ROUTES OF ADMINISTRATION**

Subcutaneous use (sheep) or intramuscular use (cattle).

**7. WITHDRAWAL PERIODS**

Withdrawal period: Zero days.

**8. EXPIRY DATE**

Exp. {mm/yyyy}  
Once broached use immediately.

**9. SPECIAL STORAGE PRECAUTIONS**

Store and transport refrigerated.  
Do not freeze.  
Protect from light.

**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**

Zoetis Belgium

**14. MARKETING AUTHORISATION NUMBERS**

EU/2/17/207/001 (20 ml)	BTV 1
EU/2/17/207/002 (100 ml)	BTV 1
EU/2/17/207/003 (240 ml)	BTV 1

**15. BATCH NUMBER**

Lot {number}

**PARTICULARS TO APPEAR ON THE OUTER PACKAGE**

**CARDBOARD BOX BTV-4 for sheep and cattle**

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

Zulvac BTV Suspension for injection.

**2. STATEMENT OF ACTIVE SUBSTANCES**

Each dose of 2 ml (sheep) or 4 ml (cattle) contains:  
Inactivated BTV, serotype 4.

**3. PACKAGE SIZE**

20 ml (10 doses for sheep, 5 doses for cattle)  
100 ml (50 doses for sheep, 25 doses for cattle)  
240 ml (120 doses for sheep, 60 doses for cattle)

**4. TARGET SPECIES**

Sheep and cattle.

**5. INDICATIONS**

**6. ROUTES OF ADMINISTRATION**

Subcutaneous use (sheep) or intramuscular use (cattle).

**7. WITHDRAWAL PERIODS**

Withdrawal period: Zero days.

**8. EXPIRY DATE**

Exp. {mm/yyyy}  
Once broached use immediately.

**9. SPECIAL STORAGE PRECAUTIONS**

Store and transport refrigerated.  
Do not freeze.  
Protect from light.

**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**

Zoetis Belgium

**14. MARKETING AUTHORISATION NUMBERS**

EU/2/17/207/004 (20 ml)	BTV 4
EU/2/17/207/005 (100 ml)	BTV 4
EU/2/17/207/006 (240 ml)	BTV 4

**15. BATCH NUMBER**

Lot {number}

**PARTICULARS TO APPEAR ON THE OUTER PACKAGE**

**CARDBOARD BOX BTV-8 for sheep and cattle**

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

Zulvac BTV Suspension for injection.

**2. STATEMENT OF ACTIVE SUBSTANCES**

Each dose of 2 ml contains:  
Inactivated BTV, serotype 8.

**3. PACKAGE SIZE**

20 ml (10 doses)  
100 ml (50 doses)  
240 ml (120 doses)

**4. TARGET SPECIES**

Sheep and cattle.

**5. INDICATIONS**

**6. ROUTES OF ADMINISTRATION**

Subcutaneous use (sheep) or intramuscular use (cattle).

**7. WITHDRAWAL PERIODS**

Withdrawal period: Zero days.

**8. EXPIRY DATE**

Exp. {mm/yyyy}  
Once broached use immediately.

**9. SPECIAL STORAGE PRECAUTIONS**

Store and transport refrigerated.  
Do not freeze.  
Protect from light.



**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**

Zoetis Belgium

**14. MARKETING AUTHORISATION NUMBERS**

EU/2/17/207/007 (20 ml)	BTV 8
EU/2/17/207/008 (100 ml)	BTV 8
EU/2/17/207/009 (240 ml)	BTV 8

**15. BATCH NUMBER**

Lot {number}

**PARTICULARS TO APPEAR ON THE IMMEDIATE PACKAGE**

**Bottle of 100 ml and 240 ml (BTV-1 for sheep and cattle)**

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

Zulvac BTV Suspension for injection.

**2. STATEMENT OF ACTIVE SUBSTANCES**

Each dose of 2 ml contains:  
Inactivated BTV, serotype 1.

100 ml (50 doses)  
240 ml (120 doses)

**3. TARGET SPECIES**

Sheep and cattle.



**4. ROUTES OF ADMINISTRATION**

Subcutaneous use (sheep) or intramuscular use (cattle).  
Read the package leaflet before use.

**5. WITHDRAWAL PERIODS**

Withdrawal period: Zero days.

**6. EXPIRY DATE**

Exp. {mm/yyyy}  
Once broached use immediately.

**7. SPECIAL STORAGE PRECAUTIONS**

Store and transport refrigerated.  
Do not freeze.  
Protect from light.

**8. NAME OF THE MARKETING AUTHORISATION HOLDER**

Zoetis Belgium

**9. BATCH NUMBER**

Lot {number}

**PARTICULARS TO APPEAR ON THE IMMEDIATE PACKAGE**

**Bottle of 100 ml and 240 ml (BTV-4 for sheep and cattle)**

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

Zulvac BTV Suspension for injection.

**2. STATEMENT OF ACTIVE SUBSTANCES**

Each dose of 2 ml (sheep) or 4 ml (cattle) contains:  
Inactivated BTV, serotype 4.

100 ml (50 doses for sheep, 25 doses for cattle)  
240 ml (120 doses for sheep, 60 doses for cattle)

**3. TARGET SPECIES**

Sheep and cattle.



**4. ROUTES OF ADMINISTRATION**

Subcutaneous use (sheep) or intramuscular use (cattle).  
Read the package leaflet before use.

**5. WITHDRAWAL PERIODS**

Withdrawal period: Zero days.

**6. EXPIRY DATE**

Exp. {mm/yyyy}  
Once broached use immediately.

**7. SPECIAL STORAGE PRECAUTIONS**

Store and transport refrigerated.  
Do not freeze.  
Protect from light.

**8. NAME OF THE MARKETING AUTHORISATION HOLDER**

Zoetis Belgium

**9. BATCH NUMBER**

Lot {number}

**PARTICULARS TO APPEAR ON THE IMMEDIATE PACKAGE**

**Bottle of 100 ml and 240 ml (BTV-8 for sheep and cattle)**

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

Zulvac BTV Suspension for injection.

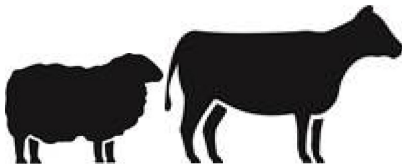
**2. STATEMENT OF ACTIVE SUBSTANCES**

Each dose of 2 ml contains:  
Inactivated BTV, serotype 8.

100 ml (50 doses)  
240 ml (120 doses)

**3. TARGET SPECIES**

Sheep and cattle.



**4. ROUTES OF ADMINISTRATION**

Subcutaneous use (sheep) or intramuscular use (cattle).  
Read the package leaflet before use.

**5. WITHDRAWAL PERIODS**

Withdrawal period: Zero days.

**6. EXPIRY DATE**

Exp. {mm/yyyy}  
Once broached use immediately.

**7. SPECIAL STORAGE PRECAUTIONS**

Store and transport refrigerated.  
Do not freeze.  
Protect from light.

**8. NAME OF THE MARKETING AUTHORISATION HOLDER**

Zoetis Belgium

**9. BATCH NUMBER**

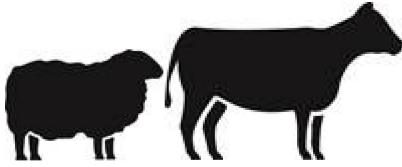
Lot {number}

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

**Bottle of 20 ml (BTV-1 for sheep and cattle)**

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

Zulvac BTV



**2. QUANTITATIVE PARTICULARS OF THE ACTIVE SUBSTANCES**

Inactivated BTV, serotype 1.

20 ml (10 doses)

**3. BATCH NUMBER**

Lot {number}

**4. EXPIRY DATE**

Exp. {mm/yyyy}

Once broached use immediately.

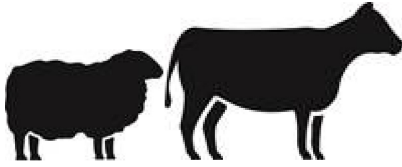


**MINIMUM PARTICULARS TO APPEAR ON SMALL IMMEDIATE PACKAGING UNITS**

**Bottle of 20 ml (BTV-4 for sheep and cattle)**

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

Zulvac BTV



**2. QUANTITATIVE PARTICULARS OF THE ACTIVE SUBSTANCES**

Inactivated BTV, serotype 4.

20 ml (10 doses for sheep, 5 doses for cattle)

**3. BATCH NUMBER**

Lot {number}

**4. EXPIRY DATE**

Exp. {mm/yyyy}

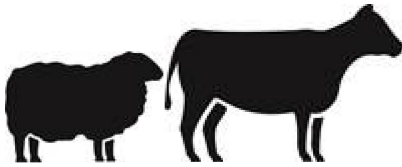
Once broached use immediately.

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

**Bottle of 20 ml (BTV-8 for sheep and cattle)**

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

Zulvac BTV



**2. QUANTITATIVE PARTICULARS OF THE ACTIVE SUBSTANCES**

Inactivated BTV, serotype 8.

20 ml (10 doses)

**3. BATCH NUMBER**

Lot {number}

**4. EXPIRY DATE**

Exp. {mm/yyyy}

Once broached use immediately.

**B. PACKAGE LEAFLET**

## PACKAGE LEAFLET

### 1. Name of the veterinary medicinal product

Zulvac BTV suspension for injection for sheep and cattle

### 2. Composition

	<b>Each dose of 2 ml contains (BTV-1, BTV-4, BTV-8 in sheep; BTV-1, BTV-8 in cattle):</b>	<b>Each dose of 4 ml contains (BTV-4 in cattle):</b>
<b>Active substances:</b>		
One of the following inactivated bluetongue virus strains.		
Inactivated bluetongue virus, serotype 1, strain BTV-1/ALG2006/01 E1	RP* $\geq$ 1	n.a.
Inactivated bluetongue virus, serotype 8, strain BTV-8/BEL2006/02	RP* $\geq$ 1	n.a.
Inactivated bluetongue virus, serotype 4, strain SPA-1/2004	RP* $\geq$ 0.8	RP* $\geq$ 0.8

n.a.: not applicable

\*Relative potency by a mice potency test compared to a reference vaccine efficacious in sheep and/or cattle.

The type of strain included in the final product will be adapted to the current epidemiological situation at the time of formulation of the final product and will be shown on the label. The target species will also be shown on the label.

#### Adjuvants:

Al <sup>3+</sup> (as hydroxide)	4 mg	8 mg
Quil-A ( <i>Quillaja saponaria</i> saponin extract)	0.4 mg	0.8 mg

#### Excipients:

Thiomersal	0.2 mg	0.4 mg
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Off-white or pink liquid.

### 3. Target species

Sheep and cattle.

### 4. Indications for use

#### Sheep:

Active immunisation of sheep from 6 weeks of age for the prevention\* of viraemia caused by bluetongue virus, serotype 1 or serotype 8.

Active immunisation of sheep from 6 weeks of age for the reduction\* of viraemia caused by bluetongue virus, serotype 4.

\*Below the level of detection of  $< 3.9 \log_{10}$  genome copies/ml by the validated RT-qPCR method, indicating no presence of viral genome.

Onset of immunity: 3 weeks after completion of the primary vaccination scheme.

Duration of immunity: 1 year after completion of the primary vaccination scheme.

#### Cattle:

Active immunisation of cattle from 12 weeks of age for the prevention\*\* of viraemia caused by bluetongue virus, serotype 1, serotype 4 or serotype 8.

\*\*Below the level of detection of  $< 3.4 \log_{10}$  genome copies/ml by a validated RT-qPCR method, indicating no presence of viral genome.

Onset of immunity:           Bluetongue virus, serotype 1: 15 days after completion of the primary vaccination scheme.  
                                  Bluetongue virus, serotype 8: 25 days after completion of the primary vaccination scheme.  
                                  Bluetongue virus, serotype 4: 14 days after completion of the primary vaccination scheme.

Duration of immunity:    Bluetongue virus, serotype 1: 1 year after completion of the primary vaccination scheme.  
                                  Bluetongue virus, serotype 8: 1 year after completion of the primary vaccination scheme.  
                                  Bluetongue virus, serotype 4: 6 months after completion of the primary vaccination scheme.

There is evidence of BTV-1 seroneutralising antibodies indicative of protection for up to 21 months after primary vaccination.

## **5. Contraindications**

None.

## **6. Special warnings**

### Special warnings:

Vaccinate healthy animals only.

No information is available on the use of the vaccine in seropositive animals including those with maternally derived antibodies.

If used in other domestic and wild ruminant species that are considered at risk of infection, its use in these species should be undertaken with care and it is advisable to test the vaccine on a small number of animals prior to mass vaccination. The level of efficacy for other species may differ from that observed in sheep and cattle.

### Pregnancy:

Can be used during pregnancy.

### Lactation:

The safety of the veterinary medicinal product has not been established during lactation in sheep. Can be used during lactation in cattle.

#### Fertility:

The safety and the efficacy of the veterinary medicinal product have not been established in breeding males. In this category of animals, the vaccine should be used only according to the benefit-risk assessment by the responsible veterinarian and/or national competent authorities on the current vaccination policies against bluetongue virus (BTV).

#### 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.

#### Overdose:

##### Sheep:

After administration with a 2-fold overdose (4 ml), reactions in sheep are similar to those seen after administration of a single dose, but injection site reactions may persist for a longer time (general swelling at the injection site persisting for not more than 9 days or subcutaneous granuloma possibly persisting for more than 63 days).

##### Cattle:

A transient increase in rectal temperature, not exceeding 2 °C, may occur in 10% of the animals during the 24 hours following administration of a 2-fold overdose.

#### Special restrictions for use and special conditions for use:

Any person intending to manufacture, import, possess, distribute, sell, supply and use this veterinary medicinal product must first consult the relevant Member State's competent authority on the current vaccination policies, as these activities may be prohibited in a Member State on the whole or part of its territory pursuant to national legislation.

#### Major incompatibilities:

Do not mix with any other veterinary medicinal product.

## **7. Adverse events**

### **Sheep:**

Very common (>1 animal / 10 animals treated):
Elevated temperature <sup>1</sup>
Injection site swelling <sup>2</sup>
Injection site nodule <sup>3</sup>

<sup>1</sup>Transient, not exceeding 1.6 °C, observed during the 48 hours following vaccination.

<sup>2</sup>Diffuse swelling, persisting for not more than 7 days.

<sup>3</sup>Palpable granuloma, up to a size of 60 cm<sup>2</sup>, decreasing in size over time but possibly persisting for more than 50 days.

### **Cattle administered a 2 ml dose:**

Very common (>1 animal / 10 animals treated):
Injection site reaction <sup>1</sup>
Common (1 to 10 animals / 100 animals treated):
Elevated temperature <sup>2</sup>

<sup>1</sup>Local reactions of up to 5 cm diameter were very commonly observed and reactions > 5 cm diameter were commonly observed. These resolved within a maximum of 25 days. Local reactions may increase slightly following the second dose, in this case lasting up to 15 days.

<sup>2</sup>Transient, not exceeding 2.7 °C, observed during the 48 hours following vaccination.

## Cattle administered a 4 ml dose:

Very common (>1 animal / 10 animals treated):
Injection site reaction <sup>1</sup>
Elevated temperature <sup>2</sup>

<sup>1</sup>Up to 6 cm in diameter, resolved in a maximum of 8 days.

<sup>2</sup>Transient, not exceeding 2.7 °C, observed within the 48 hours following vaccination with a maximum duration of 2 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}.

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

### Sheep:

Subcutaneous use.

#### Primary vaccination:

Administer two doses of 2 ml according to the following vaccination scheme:

- 1<sup>st</sup> dose: from 6 weeks of age.
- 2<sup>nd</sup> dose: after 3 weeks.

#### Re-vaccination scheme:

For protection against serotype 1 or serotype 8, administer one dose of 2 ml, every year.

For protection against serotype 4, administer two doses of 2 ml three weeks apart, every year.

### Cattle:

Intramuscular use.

#### For protection against serotype 1 and serotype 8:

##### Primary vaccination:

Administer two doses of 2 ml according to the following vaccination scheme:

- 1<sup>st</sup> dose: from 12 weeks of age.
- 2<sup>nd</sup> dose: after 3 weeks.

##### Re-vaccination scheme:

For protection against serotype 1, administer one dose of 2 ml, every year.

For protection against serotype 8, administer two doses of 2 ml three weeks apart, every year.

#### For protection against serotype 4:

##### Primary vaccination:

Administer two doses of 4 ml according to the following vaccination scheme:

- 1<sup>st</sup> dose: from 12 weeks of age.
- 2<sup>nd</sup> dose: after 3 weeks.

Re-vaccination scheme:

Administer two doses of 4 ml three weeks apart, every 6 months.

**9. Advice on correct administration**

Apply usual aseptic procedures. Shake gently immediately before use.

Avoid bubble formation, as this can be irritating at the site of injection.

The entire content of the bottle should be used immediately after broaching and during the same procedure.

In order to avoid accidental contamination of the vaccine during use, it is recommended to use a multi-injection type vaccination system when larger dose presentations are used.

**10. Withdrawal periods**

Zero days.

**11. Special storage precautions**

Keep out of the sight and reach of children.

Store and transport refrigerated (2 °C – 8 °C).

Do not freeze.

Protect from light.

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: use immediately.

**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.

Ask your veterinary surgeon or pharmacist how to dispose of medicines no longer required.

**13. Classification of veterinary medicinal products**

Veterinary medicinal product subject to prescription.

**14. Marketing authorisation numbers and pack sizes**

EU/2/17/207/001–009

Cardboard box with 1 bottle of 10 doses of 2 ml or 5 doses of 4 ml (20 ml).

Cardboard box with 1 bottle of 50 doses of 2 ml or 25 doses of 4 ml (100 ml).

Cardboard box with 1 bottle of 120 doses of 2 ml or 60 doses of 4 ml (240 ml).

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 Union Product Database (<https://medicines.health.europa.eu/veterinary>).

**16. Contact details**

Marketing authorisation holder:

Zoetis Belgium  
Rue Laid Burniat 1  
1348 Louvain-La-Neuve  
Belgium

Manufacturer responsible for batch release:

Zoetis Manufacturing & Research Spain S.L.  
Carretera De Camprodon S/n  
La Vall De Bianya  
17813 Girona  
Spain

Local representatives and contact details to report suspected adverse reactions:

**België/Belgique/Belgien**

Tél/Tel: +32 (0) 800 99 189  
[pharmvig-belux@zoetis.com](mailto:pharmvig-belux@zoetis.com)

**Lietuva**

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**Република България**

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[pvsupportireland@zoetis.com](mailto:pvsupportireland@zoetis.com)**17. Other information**

To stimulate active immunity of sheep and cattle against bluetongue virus serotype(s) related to those contained in the vaccine.