	<b>MATERIAL SAFETY DATA SHEET</b> <i>According to Regulation (EC)  1907/2006 of the European Parliament and of the Council  and Commission Regulation (EU) 453/2010</i>	Issue date: 5 June 2013
	<b>Kubatol Pix 45.2 mg/g dermal spray, solution</b>	Review date: -
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## 1. Identification of the substance/mixture and the company/enterprise

### 1.1. Product identifier

Trade name: **Kubatol Pix 45.2 mg/g dermal spray, solution**

Product code: V16

CAS code: -

ES code (EINECS): -

Other names of the substance/mixture: -

### 1.2. Relevant intended uses of the substance/mixture and uses not recommended

Designated veterinary medicinal product for dermal application with disinfecting effect. Not intended for food producing animals. Do not use on severely bleeding wounds or severely suppurating areas. Do not administer to cats.

### 1.3. Detailed data on the supplier of the Material Safety Data Sheet

**Manufacturer:** AVEFLOR, a.s.

**Address:** Budčeves 26  
507 32 Kopidlno  
Czech Republic

**Identification number:** ID: 64259838

**Phone:** + 420 493 551111

**Fax:** + 420 493 551112

**E-mail:** [aveflor@aveflor.cz](mailto:aveflor@aveflor.cz)

**Web:** <http://www.aveflor.cz>

**Qualified professional responsible for the Material Safety Data Sheet:**  
jakost@aveflor.cz

### 1.4. Emergency phone contact

- 24/7: +420 224 919 293 or +420 224 914 575 or +420 224 915 402

Address: Toxikologické informační středisko (Toxicology Information Centre), Na Bojišti 1,  
128 08 Praha 2, Czech Republic

## 2. Hazard identification

### 2.1. Classification of the substance or mixture

Veterinary medicinal product - according to Act no. 350/2011 Sb. Act on chemical substances and mixtures and amendments to certain other acts (the Chemical Act) is not subject to classification, labelling or packaging.

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**The most severe adverse physical and chemical effects and effects on human health and the environment:** In case of contact with the eyes, risk of severe irritation of eyes. Long-term targeted application may cause frostbites. Extremely flammable.

## 2.2. Label elements



**Extremely flammable**

**Identification of specific hazard:** Data not available

### Labelling of aerosol products pursuant to Government Regulation No. 194/2001 Sb.:

The container is under pressure. Do not expose to sunlight or temperatures above 50 °C. Do not pierce the container or dispose of it in fire, even if empty. Do not spray into open flames or onto hot objects. Keep away from sources of ignition – No smoking. Keep out of reach of children.

## 2.3. Other hazards:

The spray creates an explosive mixture when mixed with air. Containers may explode if overheated.

## 3. Composition/information on ingredients

The product contains the following hazardous ingredients:

Chemical formula	ES code (EINECS)	CAS code	Classification according to Directive 67/548/ECC	Classification according to Regulation (EC) 1272/2008 (CLP)	Content in weight %
Ethyl acetate	205-500-4	141-78-6	F, Xi R11-36-66-67	Flam. Liq. 2; Eye Irrit. 2; STOT SE 3; H225, H319, H336, EUH066	50 - 60
Dimethyl ether	204-065-8	115-10-6	F+, R12	Press. Gas; Flam. Gas 1; H220, H280	25 - 35
Ethanol	200-578-6	64-17-5	F, R11	Flam. Liq. 2; H225, H319	5 - 10
Beech tar (Pix fagi)	-	-	Xi, R36/38	Eye Irrit. 2; Eye Irrit. 2; H315, H319	< 5

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The full text of classifications, standard phrases and R-phrases is provided in section 16.

#### 4. **First aid measures**

##### 4.1. **First Aid description**

In case of health complications or doubts, inform your doctor and provide them with the product case or this Material Safety Data Sheet.

##### **Upon inhalation**

Take the injured person to fresh air and ensure they are both physically and mentally calm. Do not let the person get cold. If they inhale the product, provide rescue breathing and seek medical help.

##### **Upon skin contact**

Only when the contact is repeated and long-term: remove the stained clothes; wash the skin using water and soap or a brush and rinse. Cover frostbitten spots with sterile aid. If irritation persists, seek medical help.

##### **Upon eye contact**

Immediately rinse the eye thoroughly with running water (for 15 minutes). Seek medical help.

##### **Upon ingestion**

Rinse mouth with water immediately (only provided that the injured person is conscious). Never try to induce vomiting. Seek medical help immediately and show the doctor the product case or label.

##### 4.2. **Most important acute and delayed symptoms and effects**

Irritating to eyes, skin, and respiratory organs. Long-term targeted application may cause frostbites and skin dryness or cracking.

##### 4.3. **Instruction concerning immediate medical help and special treatment**

Proceed symptomatically.

#### 5. **Fire-fighting measures**

##### 5.1. **Extinguishing media**

Suitable extinguishing media: Foam, powder, sand or soil.

Unsuitable extinguishing media: Direct flow of water.

##### 5.2. **Special hazard arising from the substance or mixture**

Vapours of the product are heavier than air; they gather above ground and form explosive mixture when mixed with air.

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Under conditions of uncontrollable fire, complex aerosol mixtures form which may contain carbon oxides.

### 5.3. Instructions for fire-fighters

Fire-resistant protective clothing. If heavy smoke or vapours form, use self-contained closed-circuit breathing apparatus.

## 6. Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

Remove possible sources of ignition. No smoking. Give good airing to affected rooms. Prevent contact of the filling with the eyes or skin. Take persons who are not to be involved away.

### 6.2. Environmental precautions

Prevent contamination of the sewerage system or watercourses with the liquid or liquid gas. Upon leakage into water or the sewerage system, inform the persons concerned.

### 6.3. Methods and materials to prevent leakage and perform cleaning

Cover the product with suitable (non-flammable) absorbing material; collect in well-closed containers and dispose of pursuant to sec. 13. Dispose of the collected material in accordance with applicable local regulations. If leakage of large quantities of the product occurs, inform the fire rescue service and the environmental protection department of a municipal authority with extended powers. After the mixture has been removed, wash the contaminated place with plenty of water. After work, clean the clothing and equipment.

### 6.4. Reference to other sections

Follow instructions provided in chapters 7, 8 and 13.

## 7. Handling and storage

### 7.1. Measures for safe handling

While applying the spray, do not eat, drink or smoke. Use the product only in places where it does not get into contact with open fire and other sources of ignition or heat. Protect against direct sunlight. Prevent inhaling or injury to eyes by direct contact with the spray. Prevent ingestion.

### 7.2. Safe storage conditions

Keep in a cool, well-ventilated place at temperature not exceeding 25 °C. Do not expose to sunlight or temperatures exceeding 50 °C. Keep out of the reach of ignition sources - No smoking. Keep out of reach of children. The product must not get into direct contact with food, potable water or children's toys.

### 7.3. Specific end uses

For external use and for animals only.

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## 8. Exposure controls/ personal protection

### 8.1. Control parameters

Data for the product is not available. Exposure limits for individual ingredients in the spray:

CAS	Chemical formula	Limit	Category
141-78-6	Ethyl acetate	700 mg/m <sup>3</sup> 900 mg/m <sup>3</sup>	PEL NPK-P
115-10-6	Dimethyl ether	TWA 1000 mg/m <sup>3</sup> TLV-C 2000 mg/m <sup>3</sup>	CZ OEL CZ OEL
64-17-5	Ethanol	1000 mg/m <sup>3</sup> 3000 mg/m <sup>3</sup>	PEL NPK-P

### 8.2. Exposure controls

Follow standard measures for protection of health at work and ensure, in particular, thorough ventilation. This may be achieved by effective general ventilation. Wear protective gloves during application. Avoid inhaling the aerosol. Do not eat, drink or smoke during application. After work and before refreshment and rest break, wash your hands thoroughly with soap and water.

#### **Respiratory tract protection**

Not necessary under standard conditions of use. If higher concentrations occur, use a protective mask with a filter against organic vapours.

#### **Skin protection**

Wear protective gloves during application. If an accident occurs, prevent a long-lasting contact with the skin. Protective long-sleeve apparel, protective PVC or rubber gloves. Treat hands with a protective cream after work.

#### **Protection of face and eyes**

Where there's a risk of dispersion of the spray, use protective goggles.

#### **Thermal hazard**

Containers may explode if overheated.


#### **Limitation of exposure of the environment**

Ensure that standard measures are taken to protect the environment, see subsection 6.2.

## 9. Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

State of matter (at 20 °C):	compressed liquefied gas (aerosol)
Colour:	brown
Smell:	beech-tar-like
pH value:	not determined
Melting temperature (°C):	not determined
Boiling point range (°C):	not determined
Point of flammability (DIN 51 794):	~ 400 °C
Lower explosion limit (vol. %):	approx. 2.5

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Upper explosion limit (vol. %):	approx. 11.5
Vapour tension (at 50 °C):	< 1.2 MPa
Density (at 20 °C):	0.915 – 0.930 g/cm <sup>3</sup> (for a solution with no propellant gas)
Water solubility (at 20 °C):	insoluble
Octanol-Water Partition Coefficient (log POW):	not applicable
Viscosity (20 °C):	not determined

## 10. Stability and reactivity

### 10.1. Reactivity

The spray creates an explosive mixture when mixed with air.

### 10.2. Chemical stability

Data not available.

### 10.3. Possible hazardous reactions

Data not available.

### 10.4. Conditions which need to be prevented

Do not expose to sources of heat, sunlight or temperatures exceeding 50 °C. Protect from open fire or other sources of ignition. Containers may explode if overheated.

### 10.5. Incompatible materials

Powerful oxidizing agents, acetylene chloride, peroxides, acids, chlorides, anhydrides, alkali metals.

### 10.6. Hazardous products of decomposition

Under standard storage conditions, no hazardous decomposition products are created.

## 11. Toxicological information

### 11.1. Information on toxicological effects

Standard usage in accordance with the recommended instructions of the manufacturer is not expected to cause injury to the health of the animal or the staff. The product contains ingredients with general toxicological profiles which represent no health risks, provided they are used in the given concentration and for the given purpose. Application of the product in case of healthy people or animals under standard or reasonably predictable conditions in the way prescribed does not represent a risk of irritation, sensitization or other adverse local or system effects of toxicological nature.

The values provided below have been determined for individual ingredients in the spray based on materials provided by the manufacturer of individual ingredients.

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#### Acute toxicity of ingredients in the mixture:

Ethyl acetate	LC50 (orally, brown rat):	5620 mg/kg
	LD50 (dermally, rabbit):	> 20 mg/kg
	LC50 (by inhalation, for gases and vapours; brown rat):	45 mg/l/2 hour
Dimethyl ether	LC50 (by inhalation, rat):	164 000 ppm
Ethanol	LD50 (oral, brown rat):	> 15 800 mg/kg
	LC50 (by inhalation, brown rat):	30 000 mg/m <sup>3</sup>

#### Irritability

Irritating to eyes, skin, and respiratory organs.

#### Causticity

Based on available data, criteria for classification have not been met.

#### Sensitization

Data not available.

#### Toxicity of repeated dose

Repeated exposure may cause skin dryness or cracking.

#### Carcinogenicity

Based on available data, criteria for classification have not been met.

#### Mutagenicity

Based on available data, criteria for classification have not been met.

#### Toxicity for reproduction

Based on available data, criteria for classification have not been met.

#### Other information

Vapours may cause nausea, drowsiness or dizziness.

## 12. Environmental information

**Toxicity:** not determined

#### Toxicity of ingredients in the mixture:

Ethyl acetate	fish: LC50 = 270 - 330 mg/l/48 hrs.
	LC50 = 220 - 250 mg/l/96 hrs. (Pimephales promelas)
	invertebrates: EC50 = >3090 mg/l/24 hrs. (Daphnia sp.)
	algae: EC50 = >15 mg/l/168 hrs.
Ethanol:	fish: LC50 = 8140 mg/l/48 hrs. (L. idus)
	invertebrates: EU50 = 9268 - 14221 mg/l/48 hrs. (Daphnia magna)
	algae: IC5 = 5000 mg/l/7 days (Scenedesmus quadricauda)

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<b>Persistence and decomposability:</b>	Data not available.
<b>Bio-accumulation potential:</b>	Data not available.
<b>Mobility in soil:</b>	Data not available.
<b>Results of PBT and vPvB assessment:</b>	Not applicable, based on available data.
<b>Other adverse effects:</b>	Data not available.

### 13. Disposal considerations

#### 13.1. **Methods of waste disposal**

Dispose of in accordance with applicable regulations. Spray the aerosol out from the container until there's no pressure. Hand over the unused product or the empty container to an entity licensed to perform the disposal.

Waste type code: 20 01 22  
Waste type name: Spray container

#### **Legal regulations governing waste**

Act No. 185/2001 Sb. on waste and Act No. 188/2004 Sb. amending Act No. 185/2001 Sb.; Act No.185/2001 Sb. on waste, as amended and Act No. 188/2004 Sb. amending Act No. 185/2001 Sb.; Act No. 477/2001 Sb. on packaging and amendments to certain other acts (Packaging Act), as amended; Decree No. 376/2001 Sb. on assessment of hazardous properties of waste, as amended; Decree No. 381/2001 Sb., (Waste Catalogue) as amended.

### 14. Transport information

<b>14.1. UN code:</b>	UN 1950
<b>14.2. Proper UN shipping name:</b>	AEROSOLS, flammable
<b>14.3. Hazard class(es) for transportation:</b>	2 (Gases)
<b>14.4. Packing group:</b>	not stated
<b>14.5. Environmental hazard:</b>	NO
<b>14.6. Special safety measures for users:</b>	not stated
<b>14.7. Bulk transport pursuant to Marpol 73/78 Annex II and IBC regulation:</b>	not stated

#### **Additional information for road transport ADR/RID:**

Class: 2 (Gases)  
Classification code: 5F  
Packing group:



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Safety code:

**Additional information for sea transport IMDG:**

Class: 2 (Gases)  
Packing group:  
Safety code:  
Ems code:  
Substance contaminating sea: not stated

**Additional information for air transport ICAO/IATA-DGR:**

Class: 2 (Gases)  
Packing group:

**15. Information on legal regulations**

**15.1. Regulations concerning safety, health and the environment/specific legal regulations concerning the substance or mixture**

Regulation (EC) No. 726/2004 of the European Parliament and of the Council of 31 March 2004 laying down Community procedures for the authorisation and supervision of medicinal products for human and veterinary use and establishing a European Medicines Agency, as amended.

Directive 2001/82/EC of the European Parliament and of the Council of 6 November 2001 on the Community code relating to veterinary medicinal products, as amended.

Regulation (EC) No. 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No. 793/93 and Commission Regulation (EC) No. 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, as amended.

Regulation (EC) No. 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006, as amended.

Act No. 350/2011 Sb. on chemical substances and chemical agents, as amended.

Czech Republic Government Decree No. 194/2001 Sb. laying down technical requirements for aerosol dispensers, as amended.

Act No. 185/2001 Sb. on waste, as amended, and related implementing regulations.

**15.2. Chemical safety assessment**

No assessment of chemical safety has been performed for the mixture.

**16. Additional information**

**Changes in the Material Safety Data Sheet:** none (1<sup>st</sup> issue)

**Explanatory notes to abbreviations and acronyms**

CAS Unambiguous numerical identifier of chemical substances

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ES (EINECS)	Existing substances (European Inventory of Existing Commercial Chemical Substances)
NPK-P	The highest permissible value of concentration in working environment
PEL	Permissible exposure limit
PBT	Persistent, bio-accumulative and toxic substances
vPvB	Very persistent and very bio-accumulative substances
Eye Irrit. 2	Caustic effect and irritability to eyes, category 2
Flam. Gas 1	Flammable gas, category 1
Press. Gas	Pressurized gases
Skin Irrit. 2	Irritability to skin, category 2
Flam. Liq. 2	Flammable liquids, category 2
STOT SE 3	Toxicity for specific target organs - one-off exposure, category 3

**Important bibliographical references and data sources:**

The information provided herein is based on our best knowledge and applicable current legislation.

**List of R-phrases, S-phrases, hazard symbols, standard hazard phrases (H-phrases), safe handling instructions (P-phrases) used in this Material Safety Data Sheet:**

R11	Highly flammable
R12	Extremely flammable
R36	Irritating to eyes
R38	Irritating to skin
R66	Repeated exposure may cause skin dryness or cracking.
R67	Vapours may cause drowsiness or dizziness.
F	Highly flammable
F+	Extremely flammable
Xi	Irritating
H220	Extremely flammable gas
H225	Highly flammable liquid and vapour.
H280	Contains gas under pressure; may explode if heated.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
EUH066	Repeated exposure may cause skin dryness or cracking.

**Declaration:**

The Material Safety Data Sheet contains data for the purposes of ensuring occupational safety and protection of health at work and protection of the environment. The data provided herein correspond with the current state of knowledge and experience and is in accordance with applicable legal regulations. The supplier shall not be held liable for any damage which may be caused by incorrect use of the product. Any adjustments to the Material Safety Data Sheet not approved by a qualified professional are forbidden.