

SAFETY DATA SHEET



Veterinary Drugs Comprehensive Mix - Submix 3, Part Number 5190-0571

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product name : Veterinary Drugs Comprehensive Mix - Submix 3, Part Number 5190-0571
Part No. (Kit) : 5190-0571
Part No. : Veterinary Drugs Comprehensive Mix - Submix 3A 5190-0571A
Veterinary Drugs Comprehensive Mix - Submix 3B 5190-0571B

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses	
Analytical chemistry.	
Veterinary Drugs Comprehensive Mix - Submix 3A	1 ml
Veterinary Drugs Comprehensive Mix - Submix 3B	1 ml

1.3 Details of the supplier of the safety data sheet

Agilent Technologies Manufacturing GmbH & Co. KG
Hewlett-Packard-Str. 8
76337 Waldbronn
Germany
0800 603 1000

e-mail address of person responsible for this SDS : pdl-msds_author@agilent.com

1.4 Emergency telephone number

Emergency telephone number (with hours of operation) : CHEMTREC®: +(44)-870-8200418

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition : Veterinary Drugs Comprehensive Mix - Submix 3A Mixture
Veterinary Drugs Comprehensive Mix - Submix 3B Mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Veterinary Drugs Comprehensive Mix - Submix 3B

H225 FLAMMABLE LIQUIDS - Category 2
H302 ACUTE TOXICITY (oral) - Category 4
H312 ACUTE TOXICITY (dermal) - Category 4
H332 ACUTE TOXICITY (inhalation) - Category 4
H319 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2

See Section 16 for the full text of the H statements declared above.

Date of issue/Date of revision : 28/07/2016

SECTION 2: Hazards identification

See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements

Hazard pictograms



Signal word

: Veterinary Drugs Comprehensive Mix - Submix 3A No signal word.
 Veterinary Drugs Comprehensive Mix - Submix 3B Danger

Hazard statements

: Veterinary Drugs Comprehensive Mix - Submix 3A No known significant effects or critical hazards.
 Veterinary Drugs Comprehensive Mix - Submix 3B **GHS02** - Highly flammable liquid and vapour.
GHS07 - Harmful if swallowed.
 Harmful in contact with skin.
 Harmful if inhaled.
 Causes serious eye irritation.

Precautionary statements

Prevention

: Veterinary Drugs Comprehensive Mix - Submix 3A Not applicable.
 Veterinary Drugs Comprehensive Mix - Submix 3B P280 - Wear protective gloves. Wear eye or face protection. Wear protective clothing.
 P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
 P241 - Use explosion-proof electrical, ventilating, lighting and all material-handling equipment.

Response

: Veterinary Drugs Comprehensive Mix - Submix 3A Not applicable.
 Veterinary Drugs Comprehensive Mix - Submix 3B P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.
 P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.

Storage

: Veterinary Drugs Comprehensive Mix - Submix 3A Not applicable.
 Veterinary Drugs Comprehensive Mix - Submix 3B P235 - Keep cool.

Disposal

: Veterinary Drugs Comprehensive Mix - Submix 3A Not applicable.
 Veterinary Drugs Comprehensive Mix - Submix 3B P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.

SECTION 2: Hazards identification

Hazardous ingredients : Veterinary Drugs Comprehensive Mix - Submix 3B

Acetonitrile

Supplemental label elements : Veterinary Drugs Comprehensive Mix - Submix 3A Not applicable.

Veterinary Drugs Comprehensive Mix - Submix 3B

Veterinary Drugs Comprehensive Mix - Submix 3A Not applicable.

Veterinary Drugs Comprehensive Mix - Submix 3B

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles : Veterinary Drugs Comprehensive Mix - Submix 3A Not applicable.

Veterinary Drugs Comprehensive Mix - Submix 3A

Veterinary Drugs Comprehensive Mix - Submix 3B Not applicable.

Veterinary Drugs Comprehensive Mix - Submix 3B

Special packaging requirements

Tactile warning of danger : Veterinary Drugs Comprehensive Mix - Submix 3A Not applicable.

Veterinary Drugs Comprehensive Mix - Submix 3B

Veterinary Drugs Comprehensive Mix - Submix 3A Not applicable.

Veterinary Drugs Comprehensive Mix - Submix 3B

2.3 Other hazards

Other hazards which do not result in classification : Veterinary Drugs Comprehensive Mix - Submix 3A None known.

Veterinary Drugs Comprehensive Mix - Submix 3B

Veterinary Drugs Comprehensive Mix - Submix 3A None known.

Veterinary Drugs Comprehensive Mix - Submix 3B

SECTION 3: Composition/information on ingredients

3.2 Mixtures : Veterinary Drugs Comprehensive Mix - Submix 3A Mixture

Veterinary Drugs Comprehensive Mix - Submix 3B Mixture

Product/ingredient name	Identifiers	%	Classification	Type
Veterinary Drugs Comprehensive Mix - Submix 3B Acetonitrile	EC: 200-835-2 CAS: 75-05-8 Index: 608-001-00-3	≥75 - ≤90	Flam. Liq. 2, H225 Acute Tox. 4, H302 Acute Tox. 4, H312 Acute Tox. 4, H332 Eye Irrit. 2, H319	[1] [2]
sulfadiazine	EC: 200-685-8 CAS: 68-35-9	<0.025	Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410 (M=10)	[1]
Erythromycin	EC: 204-040-1 CAS: 114-07-8	<0.1	Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410 (M=1) See Section 16 for the full text of the H statements declared above.	[1]

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Type

SECTION 3: Composition/information on ingredients

- [1] Substance classified with a health or environmental hazard
 [2] Substance with a workplace exposure limit
 [3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII
 [4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII
 [5] Substance of equivalent concern

SECTION 4: First aid measures

4.1 Description of first aid measures

Eye contact	: Veterinary Drugs Comprehensive Mix - Submix 3A Veterinary Drugs Comprehensive Mix - Submix 3B	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
Inhalation	: Veterinary Drugs Comprehensive Mix - Submix 3A Veterinary Drugs Comprehensive Mix - Submix 3B	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
Skin contact	: Veterinary Drugs Comprehensive Mix - Submix 3A Veterinary Drugs Comprehensive Mix - Submix 3B	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention if adverse health effects persist or are severe. If necessary, call a poison center or physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Ingestion	: Veterinary Drugs Comprehensive Mix - Submix 3A Veterinary Drugs Comprehensive Mix - Submix 3B	Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. If necessary, call a poison center or physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an

SECTION 4: First aid measures

Protection of first-aiders	: Veterinary Drugs Comprehensive Mix - Submix 3A Veterinary Drugs Comprehensive Mix - Submix 3B	open airway. Loosen tight clothing such as a collar, tie, belt or waistband. No action shall be taken involving any personal risk or without suitable training. No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.
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4.2 Most important symptoms and effects, both acute and delayed

Potential acute health effects

Eye contact	: Veterinary Drugs Comprehensive Mix - Submix 3A Veterinary Drugs Comprehensive Mix - Submix 3B	No known significant effects or critical hazards. Causes serious eye irritation.
Inhalation	: Veterinary Drugs Comprehensive Mix - Submix 3A Veterinary Drugs Comprehensive Mix - Submix 3B	No known significant effects or critical hazards. Harmful if inhaled.
Skin contact	: Veterinary Drugs Comprehensive Mix - Submix 3A Veterinary Drugs Comprehensive Mix - Submix 3B	No known significant effects or critical hazards. Harmful in contact with skin.
Ingestion	: Veterinary Drugs Comprehensive Mix - Submix 3A Veterinary Drugs Comprehensive Mix - Submix 3B	No known significant effects or critical hazards. Harmful if swallowed.

Over-exposure signs/symptoms

Eye contact	: Veterinary Drugs Comprehensive Mix - Submix 3A Veterinary Drugs Comprehensive Mix - Submix 3B	No specific data. Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	: Veterinary Drugs Comprehensive Mix - Submix 3A Veterinary Drugs Comprehensive Mix - Submix 3B	No specific data. No specific data.

SECTION 4: First aid measures

Skin contact	: Veterinary Drugs Comprehensive Mix - Submix 3A	No specific data.
	: Veterinary Drugs Comprehensive Mix - Submix 3B	No specific data.
Ingestion	: Veterinary Drugs Comprehensive Mix - Submix 3A	No specific data.
	: Veterinary Drugs Comprehensive Mix - Submix 3B	No specific data.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician	: Veterinary Drugs Comprehensive Mix - Submix 3A	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
	: Veterinary Drugs Comprehensive Mix - Submix 3B	In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
Specific treatments	: Veterinary Drugs Comprehensive Mix - Submix 3A	No specific treatment.
	: Veterinary Drugs Comprehensive Mix - Submix 3B	No specific treatment.

SECTION 5: Firefighting measures**5.1 Extinguishing media**

Suitable extinguishing media	: Veterinary Drugs Comprehensive Mix - Submix 3A	Use an extinguishing agent suitable for the surrounding fire.
	: Veterinary Drugs Comprehensive Mix - Submix 3B	Use dry chemical, CO ₂ , water spray (fog) or foam.
Unsuitable extinguishing media	: Veterinary Drugs Comprehensive Mix - Submix 3A	None known.
	: Veterinary Drugs Comprehensive Mix - Submix 3B	Do not use water jet.

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture	: Veterinary Drugs Comprehensive Mix - Submix 3A	In a fire or if heated, a pressure increase will occur and the container may burst.
	: Veterinary Drugs Comprehensive Mix - Submix 3B	Highly flammable liquid and vapour. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapour/gas is heavier than air and will spread along the ground. Vapours may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Runoff to sewer may create fire or explosion hazard.

SECTION 5: Firefighting measures

Hazardous combustion products	: Veterinary Drugs Comprehensive Mix - Submix 3A	Decomposition products may include the following materials: carbon dioxide carbon monoxide sulfur oxides
	Veterinary Drugs Comprehensive Mix - Submix 3B	Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides cyanides

5.3 Advice for firefighters

Special precautions for fire-fighters	: Veterinary Drugs Comprehensive Mix - Submix 3A	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
	Veterinary Drugs Comprehensive Mix - Submix 3B	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
Special protective equipment for fire-fighters	: Veterinary Drugs Comprehensive Mix - Submix 3A	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.
	Veterinary Drugs Comprehensive Mix - Submix 3B	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	: Veterinary Drugs Comprehensive Mix - Submix 3A	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.
	Veterinary Drugs Comprehensive Mix - Submix 3B	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
For emergency responders	: Veterinary Drugs Comprehensive Mix - Submix 3A	If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
	Veterinary Drugs Comprehensive Mix - Submix 3B	If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

SECTION 6: Accidental release measures

6.2 Environmental precautions	: Veterinary Drugs Comprehensive Mix - Submix 3A	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
	: Veterinary Drugs Comprehensive Mix - Submix 3B	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

6.3 Methods and material for containment and cleaning up

Methods for cleaning up	: Veterinary Drugs Comprehensive Mix - Submix 3A	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
	: Veterinary Drugs Comprehensive Mix - Submix 3B	Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

6.4 Reference to other sections	: See Section 1 for emergency contact information. See Section 8 for information on appropriate personal protective equipment. See Section 13 for additional waste treatment information.
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SECTION 7: Handling and storage

7.1 Precautions for safe handling

Protective measures	: Veterinary Drugs Comprehensive Mix - Submix 3A	Put on appropriate personal protective equipment (see Section 8).
	: Veterinary Drugs Comprehensive Mix - Submix 3B	Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapour or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.
Advice on general occupational hygiene	: Veterinary Drugs Comprehensive Mix - Submix 3A	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
	: Veterinary Drugs Comprehensive Mix - Submix 3B	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

SECTION 7: Handling and storage

7.2 Conditions for safe storage, including any incompatibilities

: Veterinary Drugs Comprehensive Mix - Submix 3A

Store between the following temperatures: 18 to 25°C (64.4 to 77°F). Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

Veterinary Drugs Comprehensive Mix - Submix 3B

Store between the following temperatures: 18 to 25°C (64.4 to 77°F). Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

Danger criteria

Category	Notification and MAPP threshold	Safety report threshold
Veterinary Drugs Comprehensive Mix - Submix 3B P5c: Flammable liquids 2 and 3 not falling under P5a or P5b	5000	50000

7.3 Specific end use(s)

Recommendations

: Veterinary Drugs Comprehensive Mix - Submix 3A

Industrial applications, Professional applications.

Veterinary Drugs Comprehensive Mix - Submix 3B

Industrial applications, Professional applications.

Industrial sector specific solutions

: Veterinary Drugs Comprehensive Mix - Submix 3A

Not applicable.

Veterinary Drugs Comprehensive Mix - Submix 3B

Not applicable.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

Product/ingredient name	Exposure limit values
Veterinary Drugs Comprehensive Mix - Submix 3B Acetonitrile	EH40/2005 WELs (United Kingdom (UK), 12/2011). STEL: 102 mg/m ³ 15 minutes. STEL: 60 ppm 15 minutes. TWA: 40 ppm 8 hours. TWA: 68 mg/m ³ 8 hours.

SECTION 8: Exposure controls/personal protection

Recommended monitoring procedures : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

DNELs/DMELs

No DNELs/DMELs available.

PNECs

No PNECs available

8.2 Exposure controls

Appropriate engineering controls : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapour or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Individual protection measures

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

Skin protection

Hand protection : When used as intended with Agilent instruments, use of the product is not expected to result in direct contact with the chemical. However, in case of accidental contact with splash wear good quality:

Submix 3A:

Glove material: Chloroprene rubber
Glove thickness: ≥ 0.5 mm
Breakthrough time: >30 minutes

Submix 3B:

Glove material: Butyl rubber
Glove thickness: ≥ 0.2 mm
Breakthrough time: >30 minutes

While not recommended, if typical disposable laboratory nitrile gloves are used, they need to be removed immediately if contacted with the mixture.

When contacted with the product, typical laboratory nitrile gloves have very short breakthrough times, considerably less than 10 minutes.

Body protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves. Refer to European Standard EN 1149 for further information on material and design requirements and test methods.

SECTION 8: Exposure controls/personal protection

- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : When used as intended (with Agilent instruments), the use of the product under normal laboratory conditions and with standard practices does not result in significant airborne exposures, and, therefore, respiratory protection isn't needed.
In emergency situations, when a respirator is needed, use a full-face supplied air respirator and components tested and approved under appropriate government standards such as CEN (EU) or NIOSH (US).
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties**9.1 Information on basic physical and chemical properties**Appearance

- Physical state** : Veterinary Drugs Comprehensive Mix - Submix 3A Liquid.
Veterinary Drugs Comprehensive Mix - Submix 3B Liquid.
- Colour** : Veterinary Drugs Comprehensive Mix - Submix 3A Not available.
Veterinary Drugs Comprehensive Mix - Submix 3B Not available.
- Odour** : Veterinary Drugs Comprehensive Mix - Submix 3A Not available.
Veterinary Drugs Comprehensive Mix - Submix 3B Not available.
- Odour threshold** : Veterinary Drugs Comprehensive Mix - Submix 3A Not available.
Veterinary Drugs Comprehensive Mix - Submix 3B Not available.
- pH** : Veterinary Drugs Comprehensive Mix - Submix 3A Not available.
Veterinary Drugs Comprehensive Mix - Submix 3B Not available.
- Melting point/freezing point** : Veterinary Drugs Comprehensive Mix - Submix 3A 18.5°C
Veterinary Drugs Comprehensive Mix - Submix 3B -46°C
- Initial boiling point and boiling range** : Veterinary Drugs Comprehensive Mix - Submix 3A 189°C
Veterinary Drugs Comprehensive Mix - Submix 3B 82°C

SECTION 9: Physical and chemical properties

Flash point	: Veterinary Drugs Comprehensive Mix - Submix 3A	Open cup: 95°C
	: Veterinary Drugs Comprehensive Mix - Submix 3B	Closed cup: 12.8°C
Evaporation rate	: Veterinary Drugs Comprehensive Mix - Submix 3A	Not available.
	: Veterinary Drugs Comprehensive Mix - Submix 3B	2.33 (butyl acetate = 1)
Flammability (solid, gas)	: Veterinary Drugs Comprehensive Mix - Submix 3A	Not applicable.
	: Veterinary Drugs Comprehensive Mix - Submix 3B	Not applicable.
Upper/lower flammability or explosive limits	: Veterinary Drugs Comprehensive Mix - Submix 3A	Lower: 2.6%
	: Veterinary Drugs Comprehensive Mix - Submix 3B	Upper: 28.5% Lower: 3%
		Upper: 16%
Vapour pressure	: Veterinary Drugs Comprehensive Mix - Submix 3A	0.049 kPa [room temperature]
	: Veterinary Drugs Comprehensive Mix - Submix 3B	9.7 kPa [room temperature]
Vapour density	: Veterinary Drugs Comprehensive Mix - Submix 3A	Not available.
	: Veterinary Drugs Comprehensive Mix - Submix 3B	1.4 [Air = 1]
Relative density	: Veterinary Drugs Comprehensive Mix - Submix 3A	1.101
	: Veterinary Drugs Comprehensive Mix - Submix 3B	0.807
Solubility(ies)	: Veterinary Drugs Comprehensive Mix - Submix 3A	Easily soluble in the following materials: cold water and hot water.
	: Veterinary Drugs Comprehensive Mix - Submix 3B	Soluble in the following materials: cold water and hot water.
Partition coefficient: n-octanol/water	: Veterinary Drugs Comprehensive Mix - Submix 3A	Not available.
	: Veterinary Drugs Comprehensive Mix - Submix 3B	Not available.

SECTION 9: Physical and chemical properties

Auto-ignition temperature	: Veterinary Drugs Comprehensive Mix - Submix 3A	215°C
	: Veterinary Drugs Comprehensive Mix - Submix 3B	524°C
Decomposition temperature	: Veterinary Drugs Comprehensive Mix - Submix 3A	140 to 189°C
	: Veterinary Drugs Comprehensive Mix - Submix 3B	Not available.
Viscosity	: Veterinary Drugs Comprehensive Mix - Submix 3A	Not available.
	: Veterinary Drugs Comprehensive Mix - Submix 3B	Not available.
Explosive properties	: Veterinary Drugs Comprehensive Mix - Submix 3A	Not available.
	: Veterinary Drugs Comprehensive Mix - Submix 3B	Not available.
Oxidising properties	: Veterinary Drugs Comprehensive Mix - Submix 3A	Not available.
	: Veterinary Drugs Comprehensive Mix - Submix 3B	Not available.

9.2 Other information

No additional information.

SECTION 10: Stability and reactivity

10.1 Reactivity	: Veterinary Drugs Comprehensive Mix - Submix 3A	No specific test data related to reactivity available for this product or its ingredients.
	: Veterinary Drugs Comprehensive Mix - Submix 3B	No specific test data related to reactivity available for this product or its ingredients.
10.2 Chemical stability	: Veterinary Drugs Comprehensive Mix - Submix 3A	The product is stable.
	: Veterinary Drugs Comprehensive Mix - Submix 3B	The product is stable.
10.3 Possibility of hazardous reactions	: Veterinary Drugs Comprehensive Mix - Submix 3A	Under normal conditions of storage and use, hazardous reactions will not occur.
	: Veterinary Drugs Comprehensive Mix - Submix 3B	Under normal conditions of storage and use, hazardous reactions will not occur.

SECTION 10: Stability and reactivity

10.4 Conditions to avoid	: Veterinary Drugs Comprehensive Mix - Submix 3A Veterinary Drugs Comprehensive Mix - Submix 3B	No specific data. Avoid all possible sources of ignition (spark or flame). Do not pressurise, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow vapour to accumulate in low or confined areas.
10.5 Incompatible materials	: Veterinary Drugs Comprehensive Mix - Submix 3A Veterinary Drugs Comprehensive Mix - Submix 3B	May react or be incompatible with oxidising materials. Reactive or incompatible with the following materials: oxidizing materials
10.6 Hazardous decomposition products	: Veterinary Drugs Comprehensive Mix - Submix 3A Veterinary Drugs Comprehensive Mix - Submix 3B	Under normal conditions of storage and use, hazardous decomposition products should not be produced. Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Veterinary Drugs Comprehensive Mix - Submix 3B				
Acetonitrile	LC50 Inhalation Vapour	Rat	17100 ppm	4 hours
Erythromycin	LD50 Oral	Rat	2460 mg/kg	-
	LD50 Oral	Rat	4600 mg/kg	-

Acute toxicity estimates

Route	ATE value
Veterinary Drugs Comprehensive Mix - Submix 3B	
Oral	572.1 mg/kg
Dermal	1258.6 mg/kg
Inhalation (vapours)	12.59 mg/l

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Veterinary Drugs Comprehensive Mix - Submix 3B					
Acetonitrile	Eyes - Moderate irritant	Rabbit	-	24 hours 100 microliters	-
	Skin - Mild irritant	Rabbit	-	500 milligrams	-

Sensitiser

Conclusion/Summary : Not available.

Chronic toxicity / Carcinogenicity / Mutagenicity / Teratogenicity / Reproductive toxicity

Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

SECTION 11: Toxicological information

Not available.

Aspiration hazard

Not available.

Information on likely routes of exposure

: Veterinary Drugs Comprehensive Mix - Submix 3A Routes of entry anticipated: Oral, Dermal, Inhalation.
 Veterinary Drugs Comprehensive Mix - Submix 3B Routes of entry anticipated: Oral, Dermal, Inhalation.

Potential acute health effects

Inhalation : Veterinary Drugs Comprehensive Mix - Submix 3A No known significant effects or critical hazards.
 Veterinary Drugs Comprehensive Mix - Submix 3B Harmful if inhaled.

Ingestion : Veterinary Drugs Comprehensive Mix - Submix 3A No known significant effects or critical hazards.
 Veterinary Drugs Comprehensive Mix - Submix 3B Harmful if swallowed.

Skin contact : Veterinary Drugs Comprehensive Mix - Submix 3A No known significant effects or critical hazards.
 Veterinary Drugs Comprehensive Mix - Submix 3B Harmful in contact with skin.

Eye contact : Veterinary Drugs Comprehensive Mix - Submix 3A No known significant effects or critical hazards.
 Veterinary Drugs Comprehensive Mix - Submix 3B Causes serious eye irritation.

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation : Veterinary Drugs Comprehensive Mix - Submix 3A No specific data.
 Veterinary Drugs Comprehensive Mix - Submix 3B No specific data.

Ingestion : Veterinary Drugs Comprehensive Mix - Submix 3A No specific data.
 Veterinary Drugs Comprehensive Mix - Submix 3B No specific data.

Skin contact : Veterinary Drugs Comprehensive Mix - Submix 3A No specific data.
 Veterinary Drugs Comprehensive Mix - Submix 3B No specific data.

Eye contact : Veterinary Drugs Comprehensive Mix - Submix 3A No specific data.
 Veterinary Drugs Comprehensive Mix - Submix 3B Adverse symptoms may include the following:
 pain or irritation

SECTION 11: Toxicological information

watering
redness

Delayed and immediate effects as well as chronic effects from short and long-term exposure**Short term exposure**

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

General	: Veterinary Drugs Comprehensive Mix - Submix 3A	No known significant effects or critical hazards.
	Veterinary Drugs Comprehensive Mix - Submix 3B	No known significant effects or critical hazards.
Carcinogenicity	: Veterinary Drugs Comprehensive Mix - Submix 3A	No known significant effects or critical hazards.
	Veterinary Drugs Comprehensive Mix - Submix 3B	No known significant effects or critical hazards.
Mutagenicity	: Veterinary Drugs Comprehensive Mix - Submix 3A	No known significant effects or critical hazards.
	Veterinary Drugs Comprehensive Mix - Submix 3B	No known significant effects or critical hazards.
Teratogenicity	: Veterinary Drugs Comprehensive Mix - Submix 3A	No known significant effects or critical hazards.
	Veterinary Drugs Comprehensive Mix - Submix 3B	No known significant effects or critical hazards.
Developmental effects	: Veterinary Drugs Comprehensive Mix - Submix 3A	No known significant effects or critical hazards.
	Veterinary Drugs Comprehensive Mix - Submix 3B	No known significant effects or critical hazards.
Fertility effects	: Veterinary Drugs Comprehensive Mix - Submix 3A	No known significant effects or critical hazards.
	Veterinary Drugs Comprehensive Mix - Submix 3B	No known significant effects or critical hazards.

SECTION 12: Ecological information

12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
Veterinary Drugs Comprehensive Mix - Submix 3B Acetonitrile sulfadiazine Erythromycin	Acute IC50 3685000 µg/l Fresh water	Aquatic plants - Lemna minor	96 hours
	Acute LC50 3600000 µg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 1000000 µg/l Fresh water	Fish - Pimephales promelas	96 hours
	Chronic NOEC 1000000 µg/l Fresh water	Aquatic plants - Lemna minor	96 hours
	Chronic NOEC 160000 µg/l Fresh water	Daphnia - Daphnia magna	21 days
	Acute EC50 0.11 mg/l Marine water	Algae - Phaeodactylum tricornutum - Exponential growth phase	96 hours
	Acute EC50 2.19 mg/l Fresh water	Algae - Pseudokirchneriella subcapitata	72 hours
	Acute EC50 88000 µg/l	Daphnia - Daphnia magna	48 hours
	Chronic EC10 8.8 mg/l Fresh water	Daphnia - Daphnia magna - Neonate	21 days
	Chronic NOEC 0.01 mg/l Marine water	Algae - Phaeodactylum tricornutum - Exponential growth phase	96 hours
	Acute EC50 0.02 mg/l Fresh water	Algae - Pseudokirchneriella subcapitata - Exponential growth phase	3 days
	Acute EC50 0.22 mg/l Fresh water	Crustaceans - Ceriodaphnia dubia - Young	48 hours
Acute LC50 24 mg/l Fresh water	Daphnia - Daphnia longispina	48 hours	
Acute LC50 349000 µg/l Fresh water	Fish - Morone saxatilis - Fry	96 hours	
Chronic NOEC 0.0103 mg/l Fresh water	Algae - Pseudokirchneriella subcapitata	72 hours	
Chronic NOEC 11.1 mg/l Fresh water	Daphnia - Daphnia magna - Neonate	21 days	
Chronic NOEC 100 mg/l Fresh water	Fish - Oryzias latipes - Embryo	40 days	

12.2 Persistence and degradability

Not available.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Veterinary Drugs Comprehensive Mix - Submix 3B Acetonitrile	-	-	Readily

12.3 Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
Veterinary Drugs Comprehensive Mix - Submix 3B Acetonitrile sulfadiazine Erythromycin	-0.34 -0.09 3.06	- - -	low low low

12.4 Mobility in soil

Soil/water partition coefficient (K_{oc}) : Not available.

Mobility : Not available.

SECTION 12: Ecological information

12.5 Results of PBT and vPvB assessment

- PBT** : Not applicable.
vPvB : Not applicable.

12.6 Other adverse effects : No known significant effects or critical hazards.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

- Methods of disposal** : The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.
- Hazardous waste** : The classification of the product may meet the criteria for a hazardous waste.

Packaging

- Methods of disposal** : The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.
- Special precautions** : This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapour from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

Regulatory information

ADR/RID / IMDG / IATA : Not regulated.

Additional information : **Remarks**
De minimis quantities

14.6 Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code : Not available.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV - List of substances subject to authorisation

Annex XIV

None of the components are listed.

Substances of very high concern

None of the components are listed.

SECTION 15: Regulatory information

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles : Veterinary Drugs Comprehensive Mix - Submix 3A : Not applicable.
 Veterinary Drugs Comprehensive Mix - Submix 3B : Not applicable.

Other EU regulations

Europe inventory : Not determined.

Industrial emissions (integrated pollution prevention and control) - Air : Listed

Industrial emissions (integrated pollution prevention and control) - Water : Listed

Seveso Directive

This product is controlled under the Seveso Directive.

Danger criteria

Category

Veterinary Drugs Comprehensive Mix - Submix 3B

P5c: Flammable liquids 2 and 3 not falling under P5a or P5b

National regulations

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol (Annexes A, B, C, E)

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Inform Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

International lists

National inventory

Australia : Not determined.
Canada : Not determined.
China : Not determined.
Japan : **Japan inventory (ENCS)**: Not determined.
Japan inventory (ISHL): Not determined.
Malaysia : Not determined.
New Zealand : Not determined.
Philippines : Not determined.
Republic of Korea : Not determined.
Taiwan : Not determined.
Turkey : Not determined.
United States : Not determined.

SECTION 15: Regulatory information

15.2 Chemical safety assessment : This product contains substances for which Chemical Safety Assessments might still be required.

SECTION 16: Other information

✔ Indicates information that has changed from previously issued version.

Abbreviations and acronyms : ATE = Acute Toxicity Estimate
 CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
 DNEL = Derived No Effect Level
 EUH statement = CLP-specific Hazard statement
 PNEC = Predicted No Effect Concentration
 RRN = REACH Registration Number

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification	Justification
Veterinary Drugs Comprehensive Mix - Submix 3B Flam. Liq. 2, H225 Acute Tox. 4, H302 Acute Tox. 4, H312 Acute Tox. 4, H332 Eye Irrit. 2, H319	On basis of test data Calculation method Calculation method Calculation method Calculation method

Full text of abbreviated H statements : **Veterinary Drugs Comprehensive Mix - Submix 3B**
 H225 Highly flammable liquid and vapour.
 H302 Harmful if swallowed.
 H312 Harmful in contact with skin.
 H319 Causes serious eye irritation.
 H332 Harmful if inhaled.
 H400 Very toxic to aquatic life.
 H410 Very toxic to aquatic life with long lasting effects.

Full text of classifications [CLP/GHS] : **Veterinary Drugs Comprehensive Mix - Submix 3B**
 Acute Tox. 4, H302 ACUTE TOXICITY (oral) - Category 4
 Acute Tox. 4, H312 ACUTE TOXICITY (dermal) - Category 4
 Acute Tox. 4, H332 ACUTE TOXICITY (inhalation) - Category 4
 Aquatic Acute 1, H400 ACUTE AQUATIC HAZARD - Category 1
 Aquatic Chronic 1, H410 LONG-TERM AQUATIC HAZARD - Category 1
 Eye Irrit. 2, H319 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2
 Flam. Liq. 2, H225 FLAMMABLE LIQUIDS - Category 2

Date of issue/ Date of revision : 28/07/2016

Date of previous issue : No previous validation.

Version : 1

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