



SAFETY DATA SHEET

Cydetin Injection solution 1%

Version 1.0

Revision Date 01/26/2017

122000009740
Print Date 01/26/2017

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product information

Product Name: Cydetin Injection solution 1%
SDS Number: 122000009740

Use : veterinary medicine

Company

Bayer HealthCare, LLC
Animal Health Division
12707 Shawnee Mission Parkway
(West 63rd)
Shawnee, KS 66216-1846
UNITED STATES OF AMERICA
(800) 633-3796

In case of emergency: (800) 422-9874
Chemtrec: (800) 424-9300
BAYER INFORMATION PHONE:(800) 633-3796
INTERNATIONAL:(703) 527-3887

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

Classification according to national GHS implementation:

Flammable liquids, Category 2 (H225)
Reproductive toxicity, Category 2 (H361)

Label elements

Labelling according to national GHS implementation:



Danger

Hazard statements:

H225 Highly flammable liquid and vapour.
H361 Suspected of damaging fertility or the unborn child.

Precautionary statements:

Prevention:

P243 Take precautionary measures against static discharge.
P233 Keep container tightly closed.
P281 Use personal protective equipment as required.

Response:

P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.



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Storage:

P403 + P235 Store in a well-ventilated place. Keep cool.

Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

Hazardous components which must be listed on the label:

Components:	CAS-No.
Moxidectin	113507-06-5

Other hazards

Other hazards which do not result in classification:

None known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

This product is a mixture.

Hazardous components

Ethanol

Concentration [Weight percent] 20.22

CAS-No.: 64-17-5

CAS name: Ethanol

GHS Classification:



Flam. Liq. 2 H225

Moxidectin

Concentration [Weight percent] 0.9595

CAS-No.: 113507-06-5

CAS name: Milbemycin B, 5-O-demethyl-28-deoxy-25-[(1E)-1,3-dimethyl-1-butenyl]-6,28-epoxy-23-(methoxyimino)-, (6R,23E,25S)-

GHS Classification:



Acute Tox. 4 H332

Acute Tox. 3 H301

Repr. 2 H361fd

M-Factor: 10,000

Ethanol

Concentration [Weight percent] >= 20 - < 30

CAS-No.: 64-17-5

CAS name: Ethanol

Synonyms: ethanol, ethanol (In alcoholic beverages), ethanol (Anhydrous)

Index-No.: 603-002-00-5



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GHS Classification:



Flam. Liq. 2 H225

Moxidectin

Concentration [Weight percent] $\geq 0.1 - < 1$

CAS-No.: 113507-06-5

CAS name: Milbemycin B, 5-O-demethyl-28-deoxy-25-[(1E)-1,3-dimethyl-1-butenyl]-6,28-epoxy-23-(methoxyimino)-, (6R,23E,25S)-

Synonyms: (6R,23E,25S)-5-O-demethyl-28-deoxy-25-[(1E)-1,3-dimethyl-1-butenyl]-6,28-epoxy-23-(methoxyimino)milbemycin B

GHS Classification:



Acute Tox. 4 H332

Acute Tox. 3 H301

Repr. 2 H361fd

M-Factor: 10,000

For the full text of the H-Statements mentioned in this Section, see Section 16.

4. FIRST AID MEASURES

Description of first aid measures

General advice: Take off all contaminated clothing immediately.

If inhaled: Remove to fresh air. Call a physician immediately.

In case of skin contact: After contact with skin, wash immediately with plenty of soap and water. If skin reactions occur, contact a physician.

In case of eye contact: In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

If swallowed: If swallowed, seek medical advice immediately and show this container or label.

Most important acute symptoms/effects

Indication of any immediate medical attention and special treatment needed

5. FIREFIGHTING MEASURES

Extinguishing media

Suitable extinguishing media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable extinguishing media: High volume water jet

Special hazards arising from the substance or mixture

Specific hazards during firefighting: Fire may cause evolution of: Carbon monoxide (CO) Carbon dioxide (CO₂)



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Further information: Prevent fire extinguishing water from contaminating surface water or the ground water system.

Advice for firefighters

Special protective equipment for firefighters: In the event of fire, wear self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Use adequate ventilation.

Environmental precautions

Methods and materials for containment and cleaning up

Methods for cleaning up: Suppress (knock down) gases/vapours/mists with a water spray jet. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Place in closed containers. Label for proper disposal.

Reference to other sections

Additional advice: No special precautions required.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling:

Industrial uses: Avoid formation of aerosol. Only handle product with local exhaust ventilation. Avoid contact with skin, eyes and clothing.

No special protective measures against fire required.

Conditions for safe storage, including any incompatibilities

Specific end use(s)

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Propane-1,2-diol	57-55-6	TWA	10 mg/m ³	US WEEL
Ethanol	64-17-5	STEL	1,000 ppm	ACGIH
		TWA	1,000 ppm 1,900 mg/m ³	NIOSH REL
		TWA	1,000 ppm 1,900 mg/m ³	OSHA Z-1
		TWA	1,000 ppm	OSHA P0



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			1,900 mg/m3	
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Hazardous components without workplace control parameters

Components	CAS-No.
Moxidectin	113507-06-5

Personal protective equipment

- Respiratory protection : Recommended Filter type:
Organic vapor with prefilter

None required for consumer use of this product.
- Hand protection
Material : Chemically resistant gloves.
- Remarks : None required for consumer use of this product.
- Eye protection : Safety glasses
None required for consumer use of this product.
- Protective measures : No special safety precautions are required during handling of pharmaceuticals in their intended finished form (tablets or liquid formulations) by chemists, the hospital's medical staff or patients.
For the intake of ready for use pharmaceuticals or the external use on the skin please read the label and the package leaflet.
Wear suitable protective equipment.
Please consult label for end-user requirements.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

- Form: solution
Colour: clear
to
Pale yellow
- Odour: No statements available.
- Melting point/range: No statements available.
- Boiling point/boiling range: No statements available.
- Density: No statements available.
- Bulk density: Not applicable
- Vapour pressure: No statements available.
- Viscosity, dynamic: No statements available.
- Viscosity, kinematic: No statements available.
- Flow time: No statements available.
- Surface tension: No statements available.



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Water solubility:	No statements available.
Solubility(ies):	No statements available.
pH:	No statements available.
Corrosive to metal:	No statements available.
Partition coefficient (n-octanol/water):	Ethanol log Pow: -0.320 log Pow: -0.320
Flash point:	No statements available.
Inflammability (solid, gaseous):	Not applicable
Explosion limits:	Ethanol upper: 15 %(V) lower: 3.5 %(V) upper: 15 %(V) lower: 3.5 %(V)

Other information

Miscibility with water: No statements available.

10. STABILITY AND REACTIVITY

Reactivity

No statements available.

Reactions with water / air:

No statements available.

Ignition temperature:

Ethanol

425 °C

425 °C

Burning number:

No statements available.

Chemical stability

No statements available.

Thermal decomposition:

No data available

Dust explosion characteristic number:

Not applicable

Dust explosion class:

Not applicable

Impact sensitivity:

No data available

Hazardous reactions:

No data available

Explosive properties:



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No statements available.

Possibility of hazardous reactions

deflagration ability:

No statements available.

Smoldering combustion:

No statements available.

Conditions to avoid

No data available

Minimum ignition energy:

No data available

Oxidizing properties:

No statements available.

Incompatible materials

Materials to avoid:

Oxidizing agents

Hazardous decomposition products

Carbon monoxide (CO), Carbon dioxide (CO₂)

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Product:

Acute oral toxicity : Acute toxicity estimate (ATE): > 5,000 mg/kg
Method: Calculation method

Components:

Ethanol:

Acute oral toxicity : LD50 (Rat): 10,470 mg/kg
Method: OECD 401
Assessment: No adverse effect has been observed in acute toxicity tests.

Acute inhalation toxicity : LC50 (Rat): 124.7 mg/l, ca. 65360 ppm
Exposure time: 4 h
Method: OECD 403
Assessment: The substance or mixture has no acute inhalation toxicity

Acute dermal toxicity : LD50 (Rabbit): 15,800 mg/kg
Assessment: No adverse effect has been observed in acute toxicity tests.

Moxidectin:



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Acute oral toxicity : LD50 (Rat): 106 mg/kg
Assessment: Toxic if swallowed.

Acute inhalation toxicity : LC50 (Rat): 4.1 mg/l
Exposure time: 4 h
Method: Calculation method
Assessment: Harmful if inhaled.

Acute dermal toxicity : LD50 (Rabbit): > 2,000 mg/kg

Acute toxicity (other routes of administration) : LD50 (Rat): 394 mg/kg
Application Route: intraperitoneal

LD50 (Rat): > 640 mg/kg
Application Route: subcutaneous

Ethanol:

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Exposure time: 4 h
Method: Calculation method
Assessment: Harmful if inhaled.

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Skin corrosion/irritation

Components:

Ethanol:

Species: Rabbit
Method: OECD Test Guideline 404
Result: No skin irritation

Moxidectin:

Result: Moderate skin irritation

Ethanol:

Species: Rabbit
Method: OECD Test Guideline 404
Result: No skin irritation

Moxidectin:

Result: Moderate skin irritation

Serious eye damage/eye irritation

Components:

Ethanol:

Species: Rabbit
Result: Eye irritation
Method: OECD 405

Moxidectin:

Result: Moderate eye irritation

Ethanol:

Species: Rabbit
Result: Eye irritation
Method: OECD 405

Moxidectin:

Result: Moderate eye irritation

Respiratory or skin sensitisation

Components:

Ethanol:

Test Type: Skin sensitisation
Species: Guinea pig
Method: Local lymph node test (LLNA)
Result: Does not cause skin sensitisation.



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Assessment: An acute toxic effect is not expected.

Moxidectin:

Assessment: Toxic if swallowed., Harmful if inhaled.

Ethanol:

Test Type: Skin sensitisation

Species: Guinea pig

Method: Local lymph node test (LLNA)

Result: Does not cause skin sensitisation.

Assessment: An acute toxic effect is not expected.

Moxidectin:

Assessment: Toxic if swallowed., Harmful if inhaled.

Germ cell mutagenicity

Components:

Ethanol:

Genotoxicity in vitro : Test Type: Ames test
Species: Salmonella typhimurium
Method: OECD 471
Result: negative

: Test Type: Mouse lymphoma assay
Method: OECD 476
Result: negative

Genotoxicity in vivo : Test Type: Chromosome aberration test in vivo
Species: Mouse
Method: OECD 478
Result: ambiguous

Test Type: Micronucleus test
Species: Mouse
Method: OECD 474
Result: negative

Ethanol:

Genotoxicity in vitro : Test Type: Ames test
Species: Salmonella typhimurium
Method: OECD 471
Result: negative

: Test Type: Mouse lymphoma assay
Method: OECD 476
Result: negative



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Genotoxicity in vivo : Test Type: Chromosome aberration test in vivo
Species: Mouse
Method: OECD 478
Result: ambiguous

Test Type: Micronucleus test
Species: Mouse
Method: OECD 474
Result: negative

Carcinogenicity

IARC

Group 1: Carcinogenic to humans

Ethanol 64-17-5

OSHA

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

NTP

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

Components:

Ethanol:

Repeated dose toxicity - Assessment : An acute toxic effect is not expected.

Moxidectin:

Repeated dose toxicity - Assessment : Toxic if swallowed., Harmful if inhaled.

Ethanol:

Repeated dose toxicity - Assessment : An acute toxic effect is not expected.

Moxidectin:

Repeated dose toxicity - Assessment : Toxic if swallowed., Harmful if inhaled.

Further information

Components:

Ethanol:

Remarks: Breathing of the fumes may lead to narcotic symptoms.

Remarks: **If inhaled:**



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headaches
Vomiting
Nausea

Remarks: **After absorption of large quantities**
hypotension
coma
Unconsciousness
respiratory paralysis

Ethanol:

Remarks: Breathing of the fumes may lead to narcotic symptoms.

Remarks: **If inhaled:**

headaches
Vomiting
Nausea

Remarks: **After absorption of large quantities**
hypotension
coma
Unconsciousness
respiratory paralysis

12. ECOLOGICAL INFORMATION

Ecotoxicity

Components:

Ethanol:

- Toxicity to fish : LC50 (Leuciscus idus (Golden orfe)): 8,140 mg/l
Exposure time: 48 h
- Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 9,268 - 14,221 mg/l
- Toxicity to algae : Toxic limit concentration (Scenedesmus quadricauda (Green algae)): 5,000 mg/l
- Toxicity to bacteria : Toxic limit concentration (Pseudomonas putida): 6,500 mg/l

Ecotoxicology Assessment

Acute aquatic toxicity : slightly water endangering

Moxidectin:

- Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 0,16 µg/l
Test Type: Acute Fish toxicity
- Toxicity to daphnia and other : EC50 (Daphnia magna (Water flea)): 0.00003 mg/l



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aquatic invertebrates

Toxicity to algae : EC50 (*Selenastrum Capricornutum* (Green algae)): 0.087 mg/l

M-Factor (Acute aquatic toxicity) : 10,000

Ecotoxicology Assessment

Acute aquatic toxicity : Very toxic to aquatic life.

Chronic aquatic toxicity : Very toxic to aquatic life with long lasting effects.

Ethanol:

Toxicity to fish : LC50 (*Leuciscus idus* (Golden orfe)): 8,140 mg/l
Exposure time: 48 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (*Daphnia magna* (Water flea)): 9,268 - 14,221 mg/l

Toxicity to algae : Toxic limit concentration (*Scenedesmus quadricauda* (Green algae)): 5,000 mg/l

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Ecotoxicology Assessment

Acute aquatic toxicity : slightly water endangering

Moxidectin:

Toxicity to fish : LC50 (*Oncorhynchus mykiss* (rainbow trout)): 0,16 µg/l
Test Type: Acute Fish toxicity

Toxicity to daphnia and other aquatic invertebrates : EC50 (*Daphnia magna* (Water flea)): 0.00003 mg/l

Toxicity to algae : EC50 (*Selenastrum Capricornutum* (Green algae)): 0.087 mg/l

M-Factor (Acute aquatic toxicity) : 10,000

Ecotoxicology Assessment

Acute aquatic toxicity : Very toxic to aquatic life.

Chronic aquatic toxicity : Very toxic to aquatic life with long lasting effects.

Persistence and degradability

Components:

Ethanol:



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Biodegradability : Result: rapidly biodegradable

Moxidectin:

Stability in water : Degradation half life: 180 d

Ethanol:

Biodegradability : Result: rapidly biodegradable

Moxidectin:

Stability in water : Degradation half life: 180 d

Bioaccumulative potential

Components:

Ethanol:

Bioaccumulation : Remarks: Bioaccumulation is unlikely.

Partition coefficient: n-octanol/water : log Pow: -0.320

Ethanol:

Bioaccumulation : Remarks: Bioaccumulation is unlikely.

Partition coefficient: n-octanol/water : log Pow: -0.320

Mobility in soil

No data available

Other adverse effects

Product:

Additional ecological information : Do not allow to enter surface waters or groundwater.

13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : If discarded in its purchased form, this product would not be a hazardous waste either by listing or by characteristic.

However, under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste. (40 CFR 261.20-24)



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14. TRANSPORT INFORMATION

Please note that limited quantities, consumer commodity regulations or other exemptions may apply.

Land transport (CFR)

Proper shipping name:	ETHANOL SOLUTION
Hazard Class or Division:	3
UN/NA Number	1170
Packaging group	III
Hazard Label(s):	Flammable Liquid

15. REGULATORY INFORMATION

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards : No SARA Hazards

SARA 302 : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

US State Regulations

Massachusetts Right To Know

Ethanol	64-17-5	20 - 30 %
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Pennsylvania Right To Know

Propane-1,2-diol	57-55-6	50 - 70 %
Ethanol	64-17-5	20 - 30 %

New Jersey Right To Know

Propane-1,2-diol	57-55-6	50 - 70 %
Ethanol	64-17-5	20 - 30 %

New York City Hazardous Substances

Ethanol	64-17-5	20 - 30 %
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California Prop. 65

Ethanol	64-17-5	WARNING! This product contains a chemical known to the State of California to cause cancer.
		WARNING: This product contains a chemical known to the



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State of California to cause birth defects or other reproductive harm.

Ethanol 64-17-5

California Permissible Exposure Limits for Chemical Contaminants

Ethanol 64-17-5

TSCA list

No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

16. OTHER INFORMATION

Full text of H-Statements mentioned in chapters 2 and 3

H225 Highly flammable liquid and vapour.
H301 Toxic if swallowed.
H332 Harmful if inhaled.
H361 Suspected of damaging fertility or the unborn child.
H361fd Suspected of damaging fertility. Suspected of damaging the unborn child.

Further information

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.