SAFETY DATA SHEET

Moxidectin Oral Gel

Section 1. Identification

Product identifier : Moxidectin Oral Gel

Other means of identification : Quest Gel
QUEST® 2% Equine Oral Gel
QUEST® Gel
Moxidectin equine oral gel
Equest Gel

Product type : Liquid.

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

Identified uses
Veterinary product used as anti-worm agent (anthelmintic)

Uses advised against
Not for human use

Supplier's details : Zoetis Canada Inc.
16740 Trans-Canada Highway
Kirkland, Quebec, H9H 4M7

1-800-461-0917
All Safety Data Sheets are available via our Zoetis Canada website at https://www.zoetis.ca/sds/sds.aspx

Emergency telephone number (with hours of operation) : CHEMTREC (24 hours): 1-800-424-9300

International CHEMTREC (24 hours): +1-703-527-3887

Rocky Mountain Poison & Drug Safety: 1-866-531-8896
Product support/Technical services: 1-888-963-8471

Zoetis Inc.
10 Sylvan Way
Parsippany, New Jersey 07054 (USA)

Section 2. Hazard identification

Classification of the substance or mixture : SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2
AQUATIC HAZARD (ACUTE) - Category 1
AQUATIC HAZARD (LONG-TERM) - Category 1

GHS label elements

Hazard pictograms :

Signal word : Warning

Hazard statements : May cause damage to organs through prolonged or repeated exposure. (central nervous system (CNS))
Very toxic to aquatic life with long lasting effects.

Precautionary statements

Section 2. Hazard identification

Prevention : Avoid release to the environment. Do not breathe vapor.

Response : Collect spillage. Get medical advice or attention if you feel unwell.

Storage : Not applicable.

Disposal : Dispose of contents and container in accordance with all local, regional, national and international regulations.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Ingredient name	Synonyms	% (w/w)	Identifiers	
Benzyl alcohol	Benzyl alcohol	≥1 - ≤5	CAS: 100-51-6	
Moxidectin	-	≥1 - ≤5	CAS: 113507-06-5	
Sorbitan monooleate, ethoxylated	-	≥1 - ≤5	CAS: 9005-65-6	
Ethylenediaminetetraacetic acid sodium salt dihydrate	Ethylenediaminetetraacetic acid sodium salt dihydrate	≥0.5 - ≤1.5	CAS: 6381-92-6	
Oxirane, 2-methyl-, polymer with oxirane	-	≥0.5 - ≤1.5	CAS: 9003-11-6	

Ranges if listed above for hazardous ingredient(s) are prescribed ranges. The actual concentration(s) or actual concentration range(s) are being withheld as a trade secret.

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

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First-aid measures

Description of necessary first aid measures

Eye contact : 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 following exposure or if feeling unwell.

Inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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 following exposure or if feeling unwell. 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 : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention following exposure or if feeling unwell. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion : Wash out mouth with water. Remove dentures if any. 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 following exposure or if feeling unwell. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a

Section 4. First-aid measures

collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed

May cause central nervous system disorder (e.g., narcosis involving a loss of coordination, weakness, fatigue, mental confusion and blurred vision) and/or damage. Direct contact with eyes may cause temporary irritation. Exposed individuals may experience eye tearing, redness, and discomfort.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician : 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 : No specific treatment.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media : Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media : None known.

Specific hazards arising from the chemical : In a fire or if heated, a pressure increase will occur and the container may burst. This material is very toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

Hazardous thermal decomposition products : Decomposition products may include the following materials:, carbon dioxide, carbon monoxide, nitrogen oxides, phosphorus oxides, metal oxide/oxides

Special protective actions for fire-fighters : 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.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : Keep unnecessary personnel away.

For emergency responders : Keep unnecessary personnel away. If specialized 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".

Environmental precautions : Avoid dispersal of spilled 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). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

Methods and materials for containment and cleaning up

Section 6. Accidental release measures

Small spill : Stop leak if without risk. Move containers from spill area. Absorb with an inert material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill : Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations.

Section 7. Handling and storage

Precautions for safe handling

Protective measures : Put on appropriate personal protective equipment (see Section 8). Do not breathe vapor or mist. Do not ingest. Avoid contact with eyes, skin and clothing. Avoid release to the environment. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

Advice on general occupational hygiene : 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.

Conditions for safe storage, including any incompatibilities : Storage temperature: 15 to 30°C (59 to 86°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 unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Benzyl alcohol	**OARS WEEL (United States, 9/2024)** TWA 8 hours: 10 ppm.
Moxidectin	**Zoetis OEL (ZOETIS OEL)** TWA: 70 µg/m³.

Biological exposure indices

No exposure indices known.

Control Banding Approach

Not available.

Appropriate engineering controls : If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Environmental exposure controls : Inform appropriate managerial or supervisory personnel of all environmental releases.

Individual protection measures

Section 8. Exposure controls/personal protection

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.

Eye/face protection : If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

Skin protection

Hand protection : Wear appropriate chemical resistant gloves. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

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.

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 : No personal respiratory protective equipment normally required. In case of insufficient ventilation, wear suitable respiratory equipment.

Section 9. Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

Appearance

Physical state : Liquid. [Gel]

Color : Clear.

Odor : Not available.

Odor threshold : Not available.

pH : Not available.

Melting point/freezing point : Not available.

Boiling point or initial boiling point and boiling range : Not available.

Flash point : [Product does not sustain combustion.]

Evaporation rate : Not available.

Flammability : Not available.

Lower and upper explosion limit/flammability limit : Not available.

Vapor pressure : Not available.

Relative vapor density : Not available.

Relative density : Not available.

Solubility in water : Not available.

Partition coefficient: n-octanol/water : Not applicable.

Auto-ignition temperature : Not available.

Decomposition temperature : Not available.

Viscosity : Dynamic (room temperature): Not available.
Kinematic (room temperature): Not available.
Kinematic (40°C (104°F)): Not available.

Particle characteristics

Section 9. Physical and chemical properties

Pmax : Not available.

Kst : Not available.

Min. Ignition Temperature (Dust) : Not available.

Minimum ignition energy (MIE) - dust cloud : Not available.

Median particle size : Not applicable.

Section 10. Stability and reactivity

Reactivity : No specific test data related to reactivity available for this product or its ingredients.

Chemical stability : The product is stable.

Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid : No specific data.

Incompatible materials : No specific data.

Remarks : Reactive or incompatible with the following materials: oxidizing materials and reducing materials.

Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result
Benzyl alcohol	**Rat - Oral - LD50** 1230 mg/kg **Rat - Oral - LD50** 1230 mg/kg Toxic effects: Behavioral - Somnolence (general depressed activity) Behavioral - Excitement Behavioral - Coma **Rabbit - Dermal - LD50** 2000 mg/kg **Rat - Inhalation - LC50 Gas.** 1000 ppm [8 hours]
Moxidectin	**Rat - Dermal - LD50** >2000 mg/kg **Rat - Oral - LD50** 106 mg/kg
Sorbitan monooleate, ethoxylated	**Rat - Intravenous - LD50** 1790 mg/kg **Mouse - Oral - LD50** 25 g/kg
Oxirane, 2-methyl-, polymer with oxirane	**Rat - Oral - LD50** 5700 mg/kg Toxic effects: Behavioral - Somnolence (general depressed activity) Gastrointestinal - Hypermotility, diarrhea **Rat - Inhalation - LC50 Vapor** 320 mg/m³ [4 hours] Toxic effects: Lung, Thorax, or Respiration - Other changes

Section 11. Toxicological information

Liver - Other changes Kidney, Ureter, and Bladder - Other changes

Conclusion/Summary [Product] : May be harmful if swallowed.

Skin corrosion/irritation

Product/ingredient name	Result
Benzyl alcohol	**Man - Skin - Mild irritant** Duration of treatment/exposure: 48 hours Amount/concentration applied: 16 mg **Pig - Skin - Moderate irritant** Amount/concentration applied: 100 % **Rabbit - Skin - Moderate irritant** Duration of treatment/exposure: 24 hours Amount/concentration applied: 100 mg

Conclusion/Summary [Product] : Causes mild skin irritation.

Serious eye damage/eye irritation

Product/ingredient name	Result
Sorbitan monooleate, ethoxylated	**Rabbit - Eyes - Mild irritant** Amount/concentration applied: 150 mg

Conclusion/Summary [Product] : Due to partial or complete lack of data the classification is not possible.

Respiratory corrosion/irritation

Not available.

Conclusion/Summary [Product] : Due to partial or complete lack of data the classification is not possible.

Respiratory or skin sensitization

Not available.

Skin

Conclusion/Summary [Product] : Due to partial or complete lack of data the classification is not possible.

Respiratory

Conclusion/Summary [Product] : Due to partial or complete lack of data the classification is not possible.

Specific target organ toxicity (single exposure)

Not applicable.

Specific target organ toxicity (repeated exposure)

Product/ingredient name	Result
Moxidectin	SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (central nervous system (CNS)) - Category 2

Aspiration hazard

Not applicable.

Section 11. Toxicological information

Information on the likely routes of exposure

Not available.

Potential acute health effects

May cause central nervous system disorder (e.g., narcosis involving a loss of coordination, weakness, fatigue, mental confusion and blurred vision) and/or damage. Direct contact with eyes may cause temporary irritation. Exposed individuals may experience eye tearing, redness, and discomfort.

Potential chronic health effects

Product/ingredient name	Result
Moxidectin	**Sub-chronic - Dog - Oral - NOEL** 10 mg/kg [90 days] **Sub-chronic - Rat - Oral - NOEL** 50 mg/kg [13 weeks] **Chronic - Mouse - Oral - NOEL** 30 mg/kg [7 days per week] [2 years] **Chronic - Rat - Oral - NOEL** 100 mg/kg [7 days per week] [2 years] **Sub-acute - Rat - Oral - NOEL** 50 mg/kg [7 days per week] [13 weeks] Toxic effects: Specific Developmental Abnormalities - Central nervous system **Sub-acute - Dog - Oral - NOEL** 10 mg/kg [7 days per week] [90 days] Toxic effects: Specific Developmental Abnormalities - Central nervous system

General : May cause damage to organs through prolonged or repeated exposure.

Germ cell mutagenicity

Product/ingredient name	Result
Moxidectin	**In vitro - Bacteria** Bacterial Reverse Mutation Test Ames test Result: Negative **In vitro - Mammalian-Animal** In vitro Mammalian Cell Gene Mutation Test Result: Negative **In vivo - Mammalian-Animal** Mammalian Erythrocyte Micronucleus Test Result: Negative **In vivo - Mammalian-Animal** Unscheduled DNA Synthesis (UDS) Test with Mammalian Liver Cells in vivo Result: Negative

Conclusion/Summary [Product] : Due to partial or complete lack of data the classification is not possible.

Carcinogenicity

Not available.

Conclusion/Summary [Product] : Due to partial or complete lack of data the classification is not possible.

Reproductive toxicity

Section 11. Toxicological information

Product/ingredient name	Result
Moxidectin	**Rabbit - Oral** 1 mg/kg [7 days per week] Effects: NOEL Maternal toxicity: Negative **Rat - Oral** 5 mg/kg [7 days per week] Effects: NOEL Developmental: Negative **Rat - Oral** 5 mg/kg [7 days per week] Effects: NOEL Maternal toxicity: Negative Fertility effects: Negative

Conclusion/Summary [Product] : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
Moxidectin Oral Gel	4520.8	35714.3	N/A	28.2	N/A
Benzyl alcohol	1230	2000	N/A	N/A	N/A
Moxidectin	106	2500	N/A	N/A	N/A
Oxirane, 2-methyl-, polymer with oxirane	5700	N/A	N/A	0.32	N/A

Section 12. Ecological information

Toxicity

Product/ingredient name	Result
Benzyl alcohol	**Acute - LC50 - Fresh water** Fish - Bluegill - *Lepomis macrochirus* 10 ppm [96 hours] Effect: Mortality
Moxidectin	**EC50** Algae - *Selenastrum capricornutum* 87 ppb [72 hours] **EC50** Daphnia - *Daphnia magna* 0.03 ppb [48 hours] **LC50** Fish - *Oncorhynchus mykiss* 0.16 ppb [96 hours]

Conclusion/Summary [Product] : Avoid release to the environment. This material is very toxic to aquatic life with long lasting effects.

Ingredient name	Conclusion/Summary
Moxidectin	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Persistence and degradability

Section 12. Ecological information

Product/ingredient name	Result
Benzyl alcohol	OECD 301B [Ready Biodegradability - CO_2 Evolution Test] 92 to 96% [28 days]

Conclusion/Summary [Product] : Not available.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Benzyl alcohol Moxidectin	- 60 days [Soil] [25 °C] Method: DT50	- -	Readily -

Bioaccumulative potential

Product/ingredient name	$LogP_{ow}$	BCF	Potential
Benzyl alcohol Moxidectin	0.87 4.77	- -	Low High

Mobility in soil

Soil/Water partition coefficient : Not available.

Other adverse effects

No known significant effects or critical hazards.

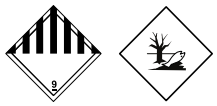
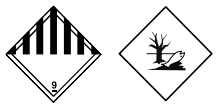
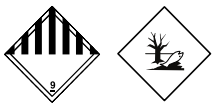
Section 13. Disposal considerations

Disposal methods : Considering the relevant known environmental and human health hazards of the material, review and implement appropriate technical and procedural waste water and waste disposal measures to prevent occupational exposure and environmental release. It is recommended that waste minimization be practiced. The best available technology should be utilized to prevent environmental releases. This may include destructive techniques for waste and wastewater. The generation of waste should be avoided or minimized 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. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. 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. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	TDG Classification	IMDG	IATA
UN number	UN3082	UN3082	UN3082
UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Moxidectin)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Moxidectin)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Moxidectin)

Section 14. Transport information

Transport hazard class(es)	9 	9 	9 
Packing group	III	III	III
Environmental hazards	Yes.	Yes.	Yes.

Additional information

TDG Classification : Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.43-2.45 (Class 9), 2.7 (Marine pollutant mark).
Non-bulk packages of this product are not regulated as dangerous goods when transported by road or rail.
Special provisions 16, 99

IMDG : This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8.
Emergency schedules F-A, S-F
Special provisions 274, 335, 969

IATA : This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 5.0.2.4.1, 5.0.2.6.1.1 and 5.0.2.8.

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.

Section 15. Regulatory information

Canadian regulations This product has been classified in accordance with the hazard criteria of the HPR and the SDS contains all the information required by the HPR.

Canadian lists

Canadian NPRI : The following components are listed: phosphorus (total); phosphorus (total)

CEPA Toxic substances : None of the components are listed.

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Inventory list

Australia : Not determined.

Canada : Not determined.

China : Not determined.

Eurasian Economic Union : **Russian Federation inventory**: All components are listed or exempted.

Section 15. Regulatory information

Japan : **Japan inventory (CSCL)**: Not determined.
Japan inventory (ISHL): Not determined.

New Zealand : All components are listed or exempted.

Philippines : Not determined.

Republic of Korea : Not determined.

Taiwan : All components are listed or exempted.

Thailand : Not determined.

Turkey : Not determined.

United States : Not determined.

Viet Nam : Not determined.

Section 16. Other information

History

Date of issue/Date of revision : 12/11/2025

Date of previous issue : 5/27/2025

Version : 1.01

Key to abbreviations : ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
DOT = Department of Transportation
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
HPR = Hazardous Products Regulations
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
IMO = International Maritime Organization
LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
N/A = Not available
SGG = Segregation Group
TDG = Transportation of Dangerous Goods
UN = United Nations

Procedure used to derive the classification

Classification	Justification
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2	Calculation method
AQUATIC HAZARD (ACUTE) - Category 1	Expert judgment
AQUATIC HAZARD (LONG-TERM) - Category 1	Expert judgment

References : Not available.

Notice to reader

Zoetis Inc. believes that the information contained in this Safety Data Sheet is accurate, and while it is provided in good faith, it is without warranty of any kind, expressed or implied. If data for a hazard are not included in this document there is no known information at this time.