



Material Safety Data Sheet
ISO/DIS 11014 / 29 CFR 1910.1200 / ANSI Z400.1

Printing date 12/14/2009

Reviewed on 12/14/2009

1 Identification of substance

- **Product details**
- **Trade name:** Eqvalan Oral Paste for Horses
Ivermectin
- **Item number:** 25874
- **Manufacturer/Supplier:**
Merial Limited
3239 Satellite Blvd.
Duluth, Ga. 30096-4640
1-888-MERIAL 1 (1-888-637-4251)
- **Emergency information:**
Emergency Information: CHEMTREC International 1 + 703-527-3887
Collect calls accepted
Spill Information:
CHEMTREC® 1-800-424-9300
CHEMTREC® International 1+703-527-3887
International calls 011+703-527-3887
Reverse charges.

2 Composition/Data on components

- **Chemical characterization**
- **Description:** Mixture: consisting of the following components.

· **Components:**

	Non hazardous substance		17.02%
57-55-6	Propylene Glycol		79.11%
13463-67-7	Titanium Dioxide		2.0%
	Ivermectin	 Danger: Warning:	1.87%

3 Hazards identification

· **Hazard description:**



Toxic

- **Information pertaining to particular dangers for man and environment:**
Toxic if swallowed.
- **Classification system:**
The classification was made according to the latest editions of international substances lists, and from company and regulatory data.

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· **NFPA ratings (scale 0 - 4)**



· **HMIS-ratings (scale 0 - 4)**



· **GHS label elements** Void

4 First aid measures

- **General information:** This product may be harmful if swallowed in large amounts.
- **After inhalation:** Not an expected route of entry.
- **After eye contact:**
Rinse opened eye for a minimum of 15 minutes under running water. Get medical attention immediately.
- **After swallowing:** Immediately call a doctor.
- **After self injection**
- **Information for doctor.**
Overexposure to ivermectin may cause drowsiness, depressed motor activity, slowed breathing, dilation of the pupils, tremors, vomiting, anorexia and incoordination.
Direct contact of the solution with eyes can cause irritation. The oral toxicity of this formulation is unknown.

5 Fire fighting measures

- **Suitable extinguishing agents:** Use water spray or all purpose dry chemical.
- **Special hazards caused by the material, its products of combustion or resulting gases:**
If exposed to fire, toxic gases including CO and CO₂ may be generated.
- **Protective equipment:**
Fire fighters should wear self-contained breathing apparatus and full protective equipment.

6 Accidental release measures

- **Person-related safety precautions:** Not required.
- **Measures for environmental protection:** Do not allow product to reach sewage system or any water course.
- **Measures for cleaning/collecting:**
Vacuum, shovel, sweep-up all spilled materials and place in sealed container for proper disposal IAW Section XIII.

7 Handling and storage

- **Handling:**
- **Information for safe handling:**
Store in cool, dry place in tightly closed containers.
Handle with care. Avoid jolting and impact.
- **Information about protection against explosions and fires:** No special measures required.

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- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Store only in the original container.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**
 Keep receptacle tightly sealed.
 Store in a cool, dry, well ventilated place.

8 Exposure controls and personal protection

- **Components with limit values that require monitoring at the workplace:**
 The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Personal protective equipment:**
- **General protective and hygienic measures:**
 Keep away from foodstuffs, beverages.
 Immediately remove all soiled and contaminated clothing.
 Wash hands before breaks and at the end of work.
 Avoid contact with the eyes and skin.
 Do not store food in the working area.
- **Protection of hands:** Not required under normal conditions of use.
- **Eye protection:**



Safety goggles.

- **Body protection:** Not required under normal conditions of use.

9 Physical and chemical properties

· General Information

Form:	Paste
Color:	White homogeneous
Odor:	Odorless

· Change in condition

Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	185°C (365°F)

· Flash point:	101°C (214°F)
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· Ignition temperature:	371.0°C (700°F)
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· Auto igniting:	Product is not self-igniting.
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· Danger of explosion:	Product does not present an explosion hazard.
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· Explosion limits:

Lower:	2.6 Vol %
Upper:	12.6 Vol %

· Vapor pressure at 20°C (68°F):	0.1 hPa
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Ivermectin

- | | |
|--|---------------------|
| · Specific gravity: | Not determined. |
| · Solubility in / Miscibility with Water: | Insoluble in water. |
| · Organic solvents: | 79.1 % |
| · Solids content: | 2.0 % |

10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Dangerous reactions** No dangerous reactions known.
- **Dangerous products of decomposition:** No dangerous decomposition products known.

11 Toxicological information

- **Acute toxicity:**

- **LD/LC50 values that are relevant for classification:**

Oral	LD50	50 mg/kg (rat)
Dermal	LD50	660 mg/kg (rat)
Inhalation	LC50/4 h	5.11 mg/l (rat)

13463-67-7 Titanium Dioxide

Oral	LD50	>20000 mg/kg (rat)
Dermal	LD50	>10000 mg/kg (rabbit)
Inhalation	LC50/4 h	>6.82 mg/l (rat)

70288-86-7 Ivermectin Comp. B1a Comp. B1b

Oral	LD Oral	>15 mg/kg (adult human)
	LD50	~80 mg/kg (dog)
		25 mg/kg (mouse)
		50 mg/kg (rat)
		>24 mg/kg (Rhesus monkey)
Dermal	LD50	406 mg/kg (rabbit)
		>660 mg/kg (rat)
	Inhalation	LC50/4h
LD Subcutaneous		>1.6 mg/kg (adult human)
	LD50	55 mg/kg (rat)
	LD50 Subcutaneous	~10 mg/kg (juvenile dog)

- **Primary irritant effect:**
- **on the skin:** Irritating to skin.
- **on the eye:** Irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**
The product shows the following dangers according to internally approved calculation methods for preparations:

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When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

12 Ecological information

· **Ecotoxicological effects:**

· **Aquatic toxicity:**

70288-86-7 Ivermectin Comp. B1a
Comp. B1b

LC50 / 48 hrs 0.025 ppb (Daphnia magna)

LC50/96 hours .3 ug/l (Rainbow Trout)

· **Remark:**

Ivermectin: LC 50 (Daphnia Magna) EPA Classification=25ppt. Very highly toxic to aquatic organisms.

· **General notes:**

Water danger class 3 (Self-assessment): extremely hazardous for water

Do not allow any volumes of product to reach ground water, water source or sewage system.

13 Disposal considerations

· **Product:**

· **Recommendation:** Disposal must be made in accordance with local and national environmental regulations.

· **Uncleaned packagings:**

· **Recommendation:** Disposal must be made in accordance with local and national environmental regulations.

14 Transport information

· **DOT regulations:**

· **Hazard class:** Not Regulated

· **Land transport ADR/RID (cross-border):**

· **ADR/RID class:** 9 Miscellaneous dangerous substances and articles

· **UN-Number:** 3082

· **Packaging group:** III

· **Proper shipping name:** Environmentally hazardous substance, liquid, n.o.s. (ivermectin)

· **Maritime transport IMDG:**

· **IMDG Class:** 9

· **UN Number:** 3082

· **Packaging group:** III

· **Marine pollutant:** Yes

· **Proper shipping name:** Environmentally hazardous substance, liquid, n.o.s. (ivermectin)

· **Air transport ICAO-TI and IATA-DGR:**

· **ICAO/IATA Class:** 9

· **UN/ID Number:** 3082

· **Packing group:** III

· **Proper shipping name:** Environmentally hazardous substance, liquid, n.o.s. (ivermectin)

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· UN "Model Regulation": -

15 Regulations

· SARA

· **Section 355 (extremely hazardous substances):**

None of the ingredients are listed.

· **Section 313 (Specific toxic chemical listings):**

None of the ingredients are listed.

· **TSCA (Toxic Substances Control Act):**

57-55-6 Propylene Glycol

13463-67-7 Titanium Dioxide

· **CA Proposition 65**

· **Chemicals known to cause cancer:**

None of the ingredients are listed.

· **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

· **Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

· **Carcinogenesis potential categories**

· **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

· **IARC (International Agency for Research on Cancer)**

13463-67-7 Titanium Dioxide

2B

· **NTP (National Toxicology Program)**

None of the ingredients is listed.

· **TLV (Threshold Limit Value established by ACGIH)**

13463-67-7 Titanium Dioxide

A4

· **MAK (German Maximum Workplace Concentration)**

None of the ingredients is listed.

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

13463-67-7 Titanium Dioxide

· **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

· **Product related hazard informations:**

The product has been classified and marked in accordance with directives on hazardous materials.

· **Hazard symbols:**

Toxic

· **Hazard-determining components of labelling:**

Ivermectin Comp Bla

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· **Risk phrases:**

Toxic if swallowed.

· **Safety phrases:**

Keep locked up and out of the reach of children.

Keep away from food, drink and animal feedingstuffs.

When using do not eat or drink.

After contact with skin, wash immediately with plenty of water

Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point

Wear suitable protective clothing and eye/face protection.

In case of accident or if you feel unwell, seek medical advice immediately.

Not recommended for interior use on large surface areas.

In case of fire, use sand, carbon dioxide or powdered extinguishing agent. Never use water.

· **Water hazard class:** Water danger class 3 (Self-assessment): extremely hazardous for water.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Contact:** MSDS Coordinator, msds@merial.com

· **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organization

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

ACGIH: American Conference of Governmental Industrial Hygienists

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent