

## **SAFETY DATA SHEETS**

**This SDS packet was issued with item:**

078435848

**The safety data sheets (SDS) in this packet apply to the individual products listed below. Please refer to invoice for specific item number(s).**

078344579 078438509

**The safety data sheets (SDS) in this packet apply to one or more components included in the items listed below. Items listed below may require one or more SDS. Please refer to invoice for specific item number(s).**

078435855



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

Printing date 01/07/2010

Reviewed on 01/07/2010

### 1 Identification of substance

- **Product details**
- **Trade name:** ZIMECTRIN Paste 1.87%
- **Item number:** 70961
- **Manufacturer/Supplier:**  
 Merial Limited  
 3239 Satellite Blvd.  
 Duluth, Ga. 30096-4640  
 1-888-MERIAL 1 (1-888-637-4251)
- **Information department:** MSDS Coordinator
- **Emergency information:**  
 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%
70288-86-7	Ivermectin Comp. B1a Comp. B1b	T, N; R 20/21-25-50 Danger:  3.1.O/2, 3.1.D/3, 3.1.I/3 Warning:  4.1.A/1	1.87%

### 3 Hazards identification

- **Hazard description:** Not applicable.
- **Classification system:**  
 The classification was made according to the latest editions of international substances lists, and from company and regulatory data.
- **NFPA ratings (scale 0 - 4)**



- **HMIS-ratings (scale 0 - 4)**

HEALTH	0	Health = 0
FIRE	1	Fire = 1
REACTIVITY	0	Reactivity = 0

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· **GHS label elements** Void

#### 4 First aid measures

- **General information:** No special measures required.
- **After inhalation:** Not an expected route of entry.
- **After skin contact:**  
 Immediately wash with water and soap and rinse thoroughly.  
 Remove contaminated clothing and shoes.  
 If skin irritation occurs, consult a doctor.
- **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.

#### 5 Fire fighting measures

- **Suitable extinguishing agents:** Use fire fighting measures that suit the environment.
- **Special hazards caused by the material, its products of combustion or resulting gases:**  
 If exposed to fire, toxic gases including CO and CO<sub>2</sub> 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.  
 Remove all residual surface material with towels moistened with methanol.
- **Additional information:** No dangerous substances are released.

#### 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.
- **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:** Store in a cool, dry, well ventilated place.

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· **Recommended storage temperature:** < 30°C (86°F)

### 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:**

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

Do not eat, drink, smoke or inhale.

Do not store food in the working area.

· **Breathing equipment:** Not required for this formulation when used in accordance with directions.

· **Protection of hands:**



Rubber or other impervious gloves

· **Eye protection:**



Safety goggles.

· **Body protection:** Use protective apron and/or outer garment.

### 9 Physical and chemical properties

· **General Information**

<b>Form:</b>	Pasty
<b>Color:</b>	White
<b>Odor:</b>	Odorless

· **Change in condition**

**Melting point/Melting range:** Undetermined.

**Boiling point/Boiling range:** 185°C (365°F)

· **Flash point:** 101°C (214°F)

· **Ignition temperature:** 371.0°C (700°F)

· **Auto igniting:** Product is not self-igniting.

· **Danger of explosion:** Product does not present an explosion hazard.

· **Explosion limits:**

**Lower:** 2.6 Vol %

**Upper:** 12.6 Vol %

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

· **Specific gravity:** Not determined.

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Trade name: ZIMECTRIN Paste 1.87%

· Solubility in / Miscibility with Water:	Not established
· Organic solvents:	79.1 %
· Solids content:	3.9 %

### 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:**

#### 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	LD50	~80 mg/kg (dog) 25 mg/kg (mouse) 50 mg/kg (rat)
Dermal	LD50	406 mg/kg (rabbit) >660 mg/kg (rat)
Inhalation	LC50/4 h	5.11 mg/l (rat)

- **Primary irritant effect:**
- **on the skin:** No irritating effect known.
- **on the eye:** No irritating effect known.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**  
 The product is not subject to classification according to internally approved calculation methods for preparations.  
 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)
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**Trade name: ZIMECTRIN Paste 1.87%**

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

**General notes:**

Water hazard class 2 (Self-assessment): hazardous for water

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

Danger to drinking water if even small quantities leak into the ground.

### 13 Disposal considerations

**Product:**

**Recommendation:**

Incinerate at an EPA approved incinerator facility.

Smaller quantities can be disposed of with household waste.

**Uncleaned packagings:**

**Recommendation:** Disposal must be made according to official regulations.

**Recommended cleansing agent:** Water, if necessary with cleansing agents.

### 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)

**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.

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· **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.

· **Product related hazard informations:**

Observe the general safety regulations when handling chemicals.

The product is not subject to identification regulations according to directives on hazardous materials.

· **Safety phrases:**

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

· **Water hazard class:** Water hazard class 2 (Self-assessment): 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.

· **Department issuing MSDS:** MSDS Coordinator

· **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

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

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