



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

Printing date 05/31/2000

Reviewed on 05/31/2000

1 Identification of substance

- **Product details**
- **Trade name:** Ivermectin
IVOMEK Plus Inj. for Cattle
- **Product number:** 41306, 41307, 41308, 41342
- **Manufacturer/Supplier:**
Merial Limited
2100 Ronson Road
Iselin, NJ 08830-3077
- **Information department:** MSDS Coordinator
- **Emergency information:**
Spill Information: CHEMTREC® 1-800-424-9300
CHEMTREC® International 1+703-527-3887
Reverse charges.
Health Information: 1-888-637-4251, Option 5

2 Composition/Data on components

- **Chemical characterization**
- **Description:** Mixture of the substances listed below.

Components:

57-55-6 Propylene Glycol	50.0 %
5464-28-8 Glycerol Formal	39.0 %
60200-06-8 Clorsulon	10.0 %
70288-86-7 Ivermectin Comp. Bla (C48H74O1) Comp. Blb (C47H72O14) T, N; R 20/21-25-50	1.0 %

- **Vaccine components** Used for treatment of cattle.

3 Hazards identification

- **Hazard description:** Not applicable.
- **Information pertaining to particular dangers for man and environment:**
 - 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)**



Health = 0
Fire = 0
Reactivity = 0

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· **HMIS-ratings (scale 0 - 4)**

HEALTH	0
FIRE	0
REACTIVITY	0

4 First aid measures

- **General information:**
Immediately remove any clothing soiled by the product.
- **After inhalation:**
Supply fresh air; consult doctor in case of complaints.
- **After skin contact:**
Immediately wash with water and soap and rinse thoroughly.
If skin irritation occurs, consult a doctor.
- **After eye contact:**
Rinse opened eye for a minimum of 15 minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:** Immediately call a doctor.
- **Information for doctor:**
- **The following symptoms may occur:**
Overexposure to ivermectin may cause drowsiness, depressed motor activity, slowed breathing, dilation of the pupils, tremors, vomiting, anorexia and incoordination.
Direct contact may cause eye irritation. May cause skin sensitization.
Pure ivermectin is considered to be highly toxic.

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:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to section XIII.
- **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.

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

- **Eye protection:** Safety goggles.
- **Body protection:** Use protective apron and/or outer garment.

9 Physical and chemical properties

- **Form:** Liquid
- **Color:** Colorless to Yellow
- **Odor:** Slight or no odor

	<u>Value/Range</u>	<u>Unit</u>	<u>Method</u>
· Change in condition			
· Melting point/Melting range:	Undetermined.		
· Boiling point/Boiling range:		185 ° C	
· Flash point:		81 ° C	
· Ignition temperature:		371.0 ° C	
· Auto igniting:	Product is not self-igniting.		
· Danger of explosion: Product does not present an explosion hazard.			
· Vapor pressure:	at 20 ° C	0.1 hPa	
· Specific gravity:	at 25 ° C	1.09-1.21	
· Solubility in / Miscibility with			

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· Water:	Not established
10 <u>Stability and reactivity</u>	
<ul style="list-style-type: none"> · Thermal decomposition / conditions to be avoided: Stable, protect from light. · Dangerous reactions No dangerous reactions known. · Dangerous products of decomposition: No dangerous decomposition products known. 	
11 <u>Toxicological information</u>	
<ul style="list-style-type: none"> · Acute toxicity: LD/LC50 values that are relevant for classification:<hr/> 	
70288-86-7 Ivermectin Comp. Bla (C48H74O1)	
Comp. Blb (C47H72O14)	
Oral: LD50: ~80 mg/kg (dog)	
LD50: 25 mg/kg (mouse)	
LD50: 50 mg/kg (rat)	
Dermal: LD50: 406 mg/kg (rabbit)	
LD50: >660 mg/kg (rat)	
Inhalative: LC50/4 h: 5.11 mg/l (rat)	
<ul style="list-style-type: none"> · Primary irritant effect: · on the skin: No irritating effect known. · on the eye: No irritating effect known. · Sensitization: Sensitization possible through skin contact. · 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 <u>Ecological information</u>	
<ul style="list-style-type: none"> · Information about elimination (persistence and degradability): · Other information: Ivermectin photodegrades rapidly in the environment and is metabolized in the soil. Water solubility is limited and it binds to soil very tightly. It does not bioconcentrate in fish and is not taken up from soil into plants. · Ecotoxicological effects: Acquatic toxicity:<hr/> 	
70288-86-7 Ivermectin Comp. Bla (C48H74O1)	
Comp. Blb (C47H72O14)	
LC50 / 48 hrs: 0.025 ppb (daphnia magna)	
LC50/96 hours: .3 ug/l (Rainbow Trout)	
<ul style="list-style-type: none"> · General notes: Water hazard class 2 (Self-assessment): hazardous for water Do not allow product to reach ground water, water source or sewage system. Danger to drinking water if even small quantities leak into the ground. 	
13 <u>Disposal considerations</u>	
<ul style="list-style-type: none"> · Product: · Recommendation: Incinerate at an EPA approved incinerator facility. 	

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

14 Transport information

- **DOT regulations:**
- **Hazard class:** -
- **Land transport ADR/RID (cross-border):**
- **ADR/RID class:** -
- **Maritime transport IMDG:**
- **IMDG Class:** -
- **Marine pollutant:** No
- **Air transport ICAO-TI and IATA-DGR:**
- **ICAO/IATA Class:** -

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
- **CA Proposition 65**
Chemicals known to cause cancer:
None of the ingredients are listed.
Chemicals known to cause reproductive toxicity:
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:**
29/56 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, 706-552-2739, msds@merial.com