



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:** IVOMEK-F Injection for Cattle
- **Item number:** 41300
- **Manufacturer/Supplier:**
Merial Limited
3239 Satellite Blvd.
Duluth, Ga. 30096-4640
1-888-MERIAL 1 (1-888-637-4251)
- **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:**

57-55-6	Propylene Glycol		50.0%
5464-28-8	Glycerol Formal	Warning: 2.6/4	39.0%
60200-06-8	Clorsulon		10.0%
70288-86-7	Ivermectin Comp. B1a Comp. B1b	 Danger: 3.1.O/2, 3.1.D/3, 3.1.I/3 Warning: 4.1.A/1	1.0%

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	2	Fire = 2
REACTIVITY	0	Reactivity = 0

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· **GHS label elements**

Warning

2.6/4 - Combustible liquid.

· **Prevention:**

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

Wear protective gloves/protective clothing/eye protection/face protection.

· **Response:**

In case of fire: Use for extinction: CO₂, powder or water spray.

· **Storage:**

Store in a well-ventilated place. Keep cool.

· **Disposal:**

Dispose of contents/container in accordance with local/regional/national/international regulations.

4 First aid measures

· **General information:** No special measures required.

· **After inhalation:** Not an expected route of entry under normal conditions of use.

· **After skin contact:** Immediately wash with water and soap and rinse thoroughly.

· **After eye contact:**

Rinse opened eye for 15 minutes under running water. Get medical attention if irritation persists.

· **After swallowing:** Immediately call a doctor.

5 Fire fighting measures

· **Suitable extinguishing agents:** Use fire fighting measures that suit the environment.

· **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 of contaminated material as waste according to section 13.

· **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.

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· **Further information about storage conditions:** 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:**

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:** If in particulate form, MSHA-NIOSH approved respirator for dust.

· **Protection of hands:** Not required under normal conditions of use.

· **Eye protection:** Not required under normal conditions of use.

9 Physical and chemical properties

· **General Information**

Form:	Liquid
Color:	Light yellow
Odor:	Odorless

· **Change in condition**

Melting point/Melting range: Undetermined.

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

· **Flash point:** 81°C (178°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 at 20°C (68°F):** 1.09 g/cm³

· **Solubility in / Miscibility with**

Water: Not miscible or difficult to mix.

Organic solvents: 50.0 %

· **Solids content:** 1.0 %

10 Stability and reactivity

· **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.

· **Dangerous reactions** No dangerous reactions known.

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· **Dangerous products of decomposition:** No dangerous decomposition products known.

11 Toxicological information

· **Acute toxicity:**

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

5464-28-8 Glycerol Formal

Oral	LD50	10200 mg/kg (rat)
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60200-06-8 Clorsulon

Oral	LD50	>20 mg/kg (mouse) >10 mg/kg (rat)
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**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
Inhalation	LC50/4h	>0.4 mg/kg (rat)
	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:** 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)
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.

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

13 Disposal considerations

- **Product:**
- **Recommendation:** Disposal must be made according to local requirements.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made in accordance with local requirements.

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.
- **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 for females:**
None of the ingredients is listed.

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· **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)**

None of the ingredients is listed.

· **NTP (National Toxicology Program)**

None of the ingredients is listed.

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

None of the ingredients is listed.

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

None of the ingredients is listed.

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

None of the ingredients is listed.

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

None of the ingredients is 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.

· **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