# **SAFETY DATA SHEETS**

# This SDS packet was issued with item: 078714757

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

078345017 078345025

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).

078345033 078345041 078345058 078408460 078704964 078803141

#### Merial

Reviewed on 10/01/2001

\_\_\_\_\_ 1 Identification of substance Product details Trade name: Ivomec Pour-On for Cattle Product number: (2.5L), (5L), (20L) Manufacturer/Supplier: Merial Limited 115 Transtech Drive Athens, GA 30601 Merial Canada Inc. 345 N. Boulevard Labbe Victoriaville, Quebec G6P 181 Information Phone No.: 819-758-0506 Emergency Phone No.: 800-424-9300 Information department: MSDS Coordinator Emergency information: Spill In formation: CHEMTREC(R) 1-800-424-9300 CHEMTREC(R) International 1+703-527-3887 Reverse charges. Health Information: 1-888-637-4251, Option 5 \_\_\_\_\_ 2 Composition/Data on components Chemical characterization Description: Mixture: consisting of the following components. \_\_\_\_\_ \_\_\_\_\_ Components: Non hazardous 19 5% inert ingredients 67-63-0 Xi, F; R 11-36-67 80.0% Isopropanol 70288-86-7 Ivermectin Comp. T, N; R 20/21-25-50 0.5% Bla (C48H74O1) Comp. Blb (C47H72O14) 3 Hazards identification \_\_\_\_\_ Hazard description: Pictogram: F Highly flammable Information pertaining to particular dangers for man and environment: R 11 Highly flammable. 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 = 3Fire = 3Reactivity = 0HMIS-ratings (scale 0 - 4) Health = 3Fire = 3Reactivity = 0\_\_\_\_\_ 4 First aid measures \_\_\_\_\_ General information: No special measures required. Involve doctor immediately. After inhalation: Seek immediate medical advice. After skin contact: Immediately wash with water and soap and rinse thoroughly. After eye contact: Rinse opened eye for a minimum of 15 minutes under running water. If symptoms occur, consult a doctor. After swallowing: Immediately call a doctor. Induce vomiting, if person is conscious. Seek medical help.

5 Fire fighting measures \_\_\_\_\_ Suitable extinguishing agents: CO2, sand, extinguishing powder. Do not use water. Water mist For safety reasons unsuitable extinguishing agents: Water with full jet Protective equipment: Fire fighters should wear selfcontained breathing apparatus and full protective equipment. \_\_\_\_\_ 6 Accidental release measures \_\_\_\_\_ Person-related safety precautions: Mount respiratory protective device. Wear protective equipment. Keep unprotected persons away. Measures for environmental protection: Do not allow product to reach sewage system or any water course. Measures for cleaning/collecting: Absorb with liquidbinding material (sand, diatomite, acid binders, universal binders, sawdust). Dispose contaminated material as waste according to Section XIII. Ensure adequate ventilation. Do not flush with water or aqueous cleansing agents 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. Use only in well ventilated areas. Information about protection against explosions and fires: Keep ignition sources away - Do not smoke. Protect against electrostatic charges. Storage: Requirements to be met by storerooms and receptacles: Store in a cool location. Store only in the original container. Protect from light. Information about storage in one common storage facility: Not required. Further information about storage conditions: Keep receptacle tightly sealed. Store in cool, dry conditions in well sealed receptacles. Store in a cool, dry, well ventilated place. \_\_\_\_\_ 8 Exposure controls and personal protection \_\_\_\_\_ Additional information about design of technical systems: No further data; see item 7. Components with limit values that require monitoring at the workplace: 67-63-0 Isopropanol ACGIH TLV (USA) Short-term value: (1230) mg/m3, (500) ppm Long-term value: (983) mg/m3, (400) ppm NIC A 4 NIOSH REL (USA) Short-term value: 1225 mg/m3, 500 ppm Long-term value: 980 mg/m3, 400 ppm OSHA PEL (USA) 980 mg/m3, 400 ppm MAK (Germany) 500 mg/m3, 200 ppm Y; (DFG) \_\_\_\_\_ Additional information: The lists that were valid during the creation were used as basis. 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. Protection of hands: Not required under normal conditions of use. Eye protection: Pictogram: Tightly sealed goggles

Body protection: Impervious protective clothing

#### Merial

9 Physical and chemical pro- Form: Liquid Color: Colored liquid Odor: Characteristic Change in condition Melting point/Melting range: Undetern Boiling point/Boiling range: 82 deg C Flash point: 14 deg C (57 deg F) Ignition temperature: 425 deg C (797 def Auto igniting: Product is not self-ignid Danger of explosion: Product is not exp formation of explosive air/vapor mixt Explosion limits: Lower: 2.0 Vol % Upper: 12.0 Vol % Vapor pressure at 20 deg C (68 deg F): Specific gravity: Not determined. Solubility in / Miscibility with Water: difficult to mix. Solvent content: Organic solvents: 80.0% 10 Stability and reaction Thermal decomposition / conditions to k decomposition if used according to sp Dangerous reactions: No dangerous react Dangerous products of decomposition: No decomposition products known. 11 Toxicological inform Acute toxicity: LD/LC50 values that are relevant for 67-63-0 Isopropanol Oral LD50 49 Dermal LD50 13 Inhalative LC50/4 h 30 70288-86-7 Ivermectin Comp. Bla (C488 Comp. Blb (C47H72014) Oral LD50 40 Dermal LD50 40	<pre>ined. (180 deg F) g F) ting. losive. However, ures are possible. 43.0 hPa Not miscible or vity e avoided: No ecifications. ions known. dangerous ation</pre>
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Inhalative LC50/4 h 5. Primary irritant effect: On the skin: No irritating effect know On the eye: No irritating effect know Sensitization: No sensitizing effects 12 Ecological informat	6 mg/kg (rabbit)
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70288-86-7 Ivermectin Comp. Bla (C488	
Comp. Blb (C47H72014)	
LC50 /48 hrs 0.025 ppb (daphnia mag	
LC50/96 hours .3 ug/l (Rainbow Trout	7401)
	7401) na)
General notes: Water hazard class 1 (Self-assessment hazardous for water. Do not allow u	7401) na)
large quantities of it to reach gro course or sewage system.	7401) na) ) . slightly

13 Disposal considerations \_\_\_\_\_ Product: Recommendation: Can be disposed of with household garbage after consulting with the waste disposal facility operator and the pertinent authorities and adhering to the necessary technical regulations. Uncleaned packagings: Recommendation: Disposal must be made according to official regulations. \_\_\_\_\_ \_\_\_\_\_ 14 Transport information \_\_\_\_\_ DOT regulations: Hazard class: 3 Identification number: UN1993 Packing group: II Proper shipping name (technical name): Flammable liquid, n.o.s., isopropanol (Isopropyl alcohol) Land transport ADR/RID (cross-border): ADR / RID class: 3 Flammable liquids Item: 3b Danger code (Kemler): 33 UN-Number: 1993 Proper shipping name: 1993 Flammable liquid, n.o.s., isopropanol (Isopropyl alcohol) Maritime transport IMDG: IMDG Class: 3.2 Page: 3230 UN Number: 1993 Packaging group: II EMS Number: 3-07 MFAG: 310,313 Marine pollutant: No Proper shipping name: Flammable liquid, n.o.s., isopropanol (Isopropyl alcohol) Air transport ICAO-TI and IATA-DGR: ICAO/IATA Class: 3 UN/ID Number: 1993 Packing group: II Proper shipping name: Flammable liquid, n. o. s., isopropanol (Isopropyl alcohol) \_\_\_\_\_ 15 Regulations \_\_\_\_\_ Sara Section 355 (extremely hazardous substances): None of the ingredients are listed. Section 313 (Specific toxic chemical listings): 67-63-0 | Isopropanol TSCA (Toxic Substances Control Act): 67-63-0 | Isopropanol 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: The product has been classified and marked in accordance with directives on hazardous materials. Hazard symbols: F Highly flammable Risk phrases: 11 Highly flammable. Safety phrases: 2 Keep out of the reach of children. 7/9 Keep container tightly closed and in a wellventilated place. 16 Keep away from sources of ignition - No smoking. 29 Do not empty into drains. 33 Take precautionary measures against static discharges. 43 In case of fire, use sand, carbon dioxide or powdered extinguishing agent. Never use water. 46 If swallowed, seek medical advice immediately and show this container or label.

51 Use only in well-ventilated areas.

Water hazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water. \_\_\_\_\_ \_\_\_\_\_

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16 Other information

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\_\_\_\_\_ 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, 706-552-2739, msds@merial.com

\_\_\_\_\_

DISCLAIMER OF EXPRESSED AND IMPLIED WARRANTIES: although preparer and owner have taken reasonable care in the preparation of this document, we extend no warranties and make no representation as to the accuracy or completeness of the information contained herein, and assume no responsibility regarding the suitability of this information for the user's intended purposes or for the consequences of its use. Each user should make a determination as to the suitability of the information for their particular purpose(s). A request has been made to the manufacturer to approve the contents of this material safety data sheet. Upon receipt of any changes a new MSDS will be made available. \_\_\_\_\_

COMPAS Code: 45920010

Merial





#### *Printing date 10/13/2010*

Reviewed on 10/13/2010

# **1 Identification of substance**

· Product details

· Trade name: IVOMEC POUR-ON FOR CATTLE

 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
-----------------------------

· Components:					
67-63-0		🗙 Xi, 🔥 F; R 11-36-67	80.0%		
	Ivermectin Comp. B1a Comp. B1b	👿 T, 握 N; R 20/21-25-50	0.5%		
	Non hazardous inert ingredients		19.5 %		
· Additional i	nformation: For the wording of the listed risk phrases refer t	to section 16.			

# **3** Hazards identification

#### · Hazard description:



Irritant Highly flammable

· Information pertaining to particular dangers for man and environment:

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version. Has a narcotizing effect. Highly flammable. Irritating to eyes. Vapours may cause drowsiness and dizziness • **Classification system:** The classification system:

The classification was made according to the latest editions of international substances lists, and from company and regulatory data.

USA -

Printing date 10/13/2010

Reviewed on 10/13/2010





Health = 1 Fire = 4 Reactivity = 0HMIS-ratings (scale 0 - 4) HEALTH 1 FIRE 4 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. Get medical attention immediately.
- *After swallowing:* Do not induce vomiting; immediately call for medical help.
- · After self injection
- · Information for doctor. In case of symptomatic effect provide treatment to maintain life functions.

#### **5** Fire fighting measures

- · Suitable extinguishing agents:
- CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- · For safety reasons unsuitable extinguishing agents: Water with full jet
- · Protective equipment: Self-contained breathing apparatus and full protective equipment.

#### **6** Accidental release measures

- *Person-related safety precautions:* Wear protective equipment. Keep unprotected persons away. Ensure adequate ventilation
- *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.

*Ensure adequate ventilation.* 

# 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. Use only in well ventilated areas.

Printing date 10/13/2010

Reviewed on 10/13/2010

#### Trade name: IVOMEC POUR-ON FOR CATTLE

- *Information about protection against explosions and fires: Keep ignition sources away - Do not smoke. Protect against electrostatic charges.*
- · Storage:
- Requirements to be met by storerooms and receptacles: Store in a cool location.
- · Information about storage in one common storage facility: Not required.
- $\cdot$  Further information about storage conditions:
- Keep receptacle tightly sealed. Store in cool, dry conditions in well sealed receptacles. Store in a cool, dry, well ventilated place.
- · **Recommended storage temperature:**  $< 30^{\circ}C (86^{\circ}F)$

# 8 Exposure controls and personal protection

• Additional information about design of technical systems: No further data; see item 7.

-	h limit values that require monitoring at the workplace:
67-63-0 Isoprope	inol
PEL (USA)	980 mg/m³, 400 ppm
REL (USA)	Short-term value: 1225 mg/m³, 500 ppm
	Long-term value: 980 mg/m³, 400 ppm
TLV (USA)	Short-term value: 984 mg/m <sup>3</sup> , 400 ppm
	Long-term value: 492 mg/m <sup>3</sup> , 200 ppm
MAK (Germany)	500 mg/m <sup>3</sup> , 200 ppm
	Y; DFG
Additional inform	<i>mation:</i> The lists that were valid during the creation were used as basis.
Personal protect	ive equipment:
General protecti	ve and hygienic measures:
Keep away from	foodstuffs, beverages.
· · · ·	ove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

- Avoid contact with the eyes.
- Avoid contact with the eyes and skin.
- Do not eat, drink, smoke or inhale.

Do not store food in the working area.

- Breathing equipment: Use suitable respiratory protective device when aerosol or mist is formed.
- *Protection of hands:* Not required under normal conditions of use.
- · Eye protection:



Safety goggles.

General Information	1	
Form:	Liquid	
Color:	Blue	
Odor:	Like alcohol	

Printing date 10/13/2010

Reviewed on 10/13/2010

## Trade name: IVOMEC POUR-ON FOR CATTLE

<ul> <li>Change in condition Melting point/Melting range: Boiling point/Boiling range:</li> </ul>	
· Flash point:	14°C (57°F)
· Ignition temperature:	425.0°C (797°F)
· Auto igniting:	Product is not self-igniting.
· Danger of explosion:	Product is not explosive. However, formation of explosive air/vapor mixtures are possible.
· Explosion limits:	
Lower:	2.0 Vol %
Upper:	12.0 Vol %
· Vapor pressure at 20°C (68°F):	43.0 hPa (32 mm Hg)
· Specific gravity at $20^{\circ}C$ (68°F):	0 g/cm <sup>3</sup>
· Solubility in / Miscibility with Water:	Not miscible or difficult to mix.
Organic solvents:	80.0 %
Solids content:	0.5 %

# **10 Stability and reactivity**

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

- Materials to be avoided:
- · Dangerous reactions

Reacts with acetaldehyde, chlorine, ethylene oxide, hypochlorous acid, isocyanates, phosgene, oleum, perchloric acid, and strong oxidizing agents.

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

# **11 Toxicological information**

· Acute toxicity.	•	Acute	toxicity:
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67-63-0	Isopropanol		
Oral	LD50	4570 mg/kg (rat)	
Dermal	LD50	13400 mg/kg (rabbit)	
Inhalati	on LC50/4 h	30 mg/l (rat)	
70288-8	6-7 Ivermectin Cor	np. Bla	
	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)	

Printing date 10/13/2010

Reviewed on 10/13/2010

#### Trade name: IVOMEC POUR-ON FOR CATTLE

Dermal	LD50	406 mg/kg (rabbit)	
		>660 mg/kg (rat)	
Inhalation	LC50/4h	>0.4 mg/kg (rat)	
	LD Subcutaneous	>1.6 mg/kg (adult human)	
	LD50 Intraperitoneal	55 mg/kg (rat)	
	LD50 Subcutaneous	~10 mg/kg (juvenile dog)	
· Primary in	· Primary irritant effect:		

• on the skin: No irritating effect known.

• on the eye: Irritating effect.

Sourie eye. Intituting effect.

• Sensitization: No sensitizing effects known.

Additional toxicological information:

The product shows the following dangers according to internally approved calculation methods for preparations: Irritant

# **12 Ecological information**

· Ecotoxological effects:

· Aquatic toxicity:

70288-86-7 Ivermectin Comp. B1a

Comp. B1b

LC50 / 48 hrs 0.025 ppb (Daphnia magna)

*LC50/96 hours* 0.3 *ug/l* (*Rainbow Trout*)

# **13 Disposal considerations**

· Product:

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

· Uncleaned packagings:

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



Printing date 10/13/2010

Reviewed on 10/13/2010

Label	3	
Land transport ADR/RID (cross	s-border):	
ADR/RID class:		
ADK/KID class: Danger code (Kemler):	3 Flammable liquids 33	
UN-Number:	1219	
Packaging group:	121) 11	
Proper shipping name:	1263 PAINT	
Maritime transport IMDG:		
Marume transport 1MDG:		
IMDG Class:	3	
UN Number:	1219	
Label	3	
Packaging group:	II	
EMS Number:	F- $E$ , $S$ - $E$	
Marine pollutant:	Yes	
Proper shipping name:	ISOPROPANOL (ISOPROPYL ALCOHOL)	
Air transport ICAO-TI and IAT	A-DGR:	
3		
ICAO/IATA Class:	3	
UN/ID Number:	1219	
Label	3	
Packing group:	II	
Proper shipping name:	ISOPROPANOL (ISOPROPYL ALCOHOL)	

# **15 Regulations**

· SARA
--------

· Section 355 (extremely hazardous substances):
None of the ingredients are listed.
· Section 313 (Specific toxic chemical listings):
67-63-0 Isopropanol
· TSCA (Toxic Substances Control Act):
67-63-0 Isopropanol
· CA Proposition 65
· Chemicals known to cause cancer:
None of the ingredients are listed.

3

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

Printing date 10/13/2010

Reviewed on 10/13/2010

#### Trade name: IVOMEC POUR-ON FOR CATTLE

<ul> <li>Chemicals known to</li> </ul>	cause reproductive	toxicity for females:

None of the ingredients is listed.

 $\cdot$  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.

 $\cdot$  Carcinogenesis potential categories

· EPA (Environmental Protection Agency)

None of the ingredients is listed.

· IARC (International Agency for Research on Cancer)

67-63-0 Isopropanol

#### · 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:

• Hazard symbols: Irritant Highly flammable

#### · Risk phrases:

Highly flammable. Irritating to eyes. Vapours may cause drowsiness and dizziness

## · Safety phrases:

Keep out of the reach of children.
Keep container tightly closed and in a well-ventilated place.
Keep away from sources of ignition - No smoking.
Do not breathe gas/fumes/vapour/spray.
Avoid contact with skin and eyes.
In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point Take precautionary measures against static discharges.
In case of fire, use sand, carbon dioxide or powdered extinguishing agent. Never use water.
If swallowed, seek medical advice immediately and show this container or label.
This material and its container must be disposed of as hazardous waste.
If swallowed, rinse mouth with water (only if the person is conscious)

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

USA

USA

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

*Printing date 10/13/2010* 

Reviewed on 10/13/2010

Trade name: IVOMEC POUR-ON FOR CATTLE

## **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



Printing date 10/19/2017

Reviewed on 10/18/2017

Page 1/9

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Product ider	ıtifier
Trade name	: Ivomec® Pour On (finished product)
Manufactur Merial, Inc. 3239 Satellin Duluth, Ga. 1-888-MERI Emergency i Emergency i Spill Informa CHEMTREC CHEMTREC Internationa Reverse chan Spill Informa	re Blvd. 30096-4640 AL 1 (1-888-637-4251) telephone number: information: ation: C® 1-800-424-9300 C® International 1+703-527-3887 I calls 011+703-527-3887 rges
	identification n of the substance or mixture
Classificatio	
Classificatio	n of the substance or mixture HS02 Flame
Classificatio	n of the substance or mixture HS02 Flame H225 Highly flammable liquid and vapor.
Classificatio	n of the substance or mixture HS02 Flame H225 Highly flammable liquid and vapor. HS07
Classificatio	n of the substance or mixture HS02 Flame H225 Highly flammable liquid and vapor. HS07 H319 Causes serious eye irritation. H336 May cause drowsiness or dizziness. Ints lements The product is classified and labeled according to the Globally Harmonized System (GHS). ograms GHS02, GHS07
Classificatio	n of the substance or mixture HS02 Flame H225 Highly flammable liquid and vapor. HS07 H319 Causes serious eye irritation. H336 May cause drowsiness or dizziness. Its lements The product is classified and labeled according to the Globally Harmonized System (GHS). Ograms GHS02, GHS07 Danger rmining components of labeling:

Printing date 10/19/2017

Reviewed on 10/18/2017

Trade name: Ivomec® Pour On (finished product)		
P241	Use explosion-proof electrical/ventilating/lighting/equipment.	
P261	Avoid breathing dust/fume/gas/mist/vapors/spray	
P280	Wear protective gloves / eye protection / face protection.	
P240	Ground/bond container and receiving equipment.	
P242	Use only non-sparking tools.	
P243	Take precautionary measures against static discharge.	
P264	Wash thoroughly after handling.	
P271	Use only outdoors or in a well-ventilated area.	
P303+P361+P353	If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.	
P305+P351+P338	If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.	
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.	

P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathin
P312	Call a POISON CENTER/doctor if you feel unwell.
P337+P313	If eye irritation persists: Get medical advice/attention.
P370+P378	In case of fire: Use for extinction: CO2, powder or water spray.
P405	Store locked up.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P403+P235	Store in a well-ventilated place. Keep cool.
P501	Dispose of contents/container in accordance with local/regional/natio

- Dispose of contents/container in accordance with local/regional/national/international P501 regulations.
- · Classification system:

· NFPA ratings (scale 0 - 4)



#### · HMIS-ratings (scale 0 - 4)

HEALTH	2	Health = 2
		Fire = 3
REACTIVITY	0	Reactivity = 0

- · Other hazards
- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · vPvB: Not applicable.

# 3 Composition/information on ingredients

· Chemical characterization: Mixtures

	<ul> <li>Components</li> </ul>	5:	
70288-86-7 Ivermectin Comp. B1a $\geq 0.25 - < 1$	67-63-0	Isopropanol	50-70%
		🚸 Flam. Liq. 2, H225; 🚸 Eye Irrit. 2A, H319; STOT SE 3, H336	
	70288-86-7	Ivermectin Comp. B1a	$\geq 0.25 - < 1\%$
		Comp. B1b	
• Additional information: For the wording of the listed hazard phrases refer to section 16.			

Printing date 10/19/2017

Reviewed on 10/18/2017

#### Trade name: Ivomec® Pour On (finished product)

# 4 First-aid measures

#### · Description of first aid measures

· General information:

In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). First Aid responders should pay attention to self-protection and use the recommended protective clothing Remove from exposure, lie down. Take off immediately all contaminated clothing. Victim to lie down in the recovery position, cover and keep him warm.

- · After inhalation: Move to fresh air.
- After skin contact: Wash off immediately with plenty of water.
- After eye contact:

Rinse immediately with plenty of water for at least 15 minutes. Keep eye wide open while rinsing.

- · After swallowing: Rinse mouth. Drink plenty of water.
- · After self injection
- Most important symptoms and effects, both acute and delayed Causes serious eye irritation. May cause drowsiness or dizziness.
- Indication of any immediate medical attention and special treatment needed No further relevant information available.

#### 5 Fire-fighting measures

- · Extinguishing media
- Suitable extinguishing agents:
- CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam. • Special hazards arising from the substance or mixture
- In case of fire and/or explosion do not breathe fumes. Carbon oxides can be released in case of fire.
- · Advice for firefighters
- · Protective equipment: Self-contained breathing apparatus and full protective equipment.
- · Additional information

*Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.* 

## 6 Accidental release measures

• Personal precautions, protective equipment and emergency procedures Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

High risk of slipping due to leakage/spillage of product.

- Environmental precautions: Do not allow product to reach sewage system or any water course.
- Methods and material for containment and cleaning up: Pick up and transfer to properly labelled containers.
- · Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

#### 7 Handling and storage

· Handling:

- · Precautions for safe handling
- Provide sufficient air exchange and/or exhaust in work rooms.

Wash hands and face before breaks and immediately after handling the product. Keep working clothes separately.

US

US

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

Printing date 10/19/2017

Reviewed on 10/18/2017

Trade name: Ivomec<sup>®</sup> Pour On (finished product)

- *Information about protection against explosions and fires: Keep ignition sources away - Do not smoke. Protect against electrostatic charges.*
- · Conditions for safe storage, including any incompatibilities
- · Storage:
- Requirements to be met by storerooms and receptacles: Protect from heat and direct sunlight.
- · Information about storage in one common storage facility: Not required.
- Further information about storage conditions: Keep away from food, drink and animal feedingstuffs.
- · Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

- Additional information about design of technical systems: No further data; see item 7.
- · Control parameters
- · Components with limit values that require monitoring at the workplace:
- The following constituent is the only constituent of the product which has a PEL, TLV or other recommended exposure limit.

At this time, the remaining constituent has no known exposure limits.

67-63-0 Isopropanol		
PEL (USA)	Long-term value: 980 mg/m³, 400 ppm	
REL (USA)	Short-term value: 1225 mg/m³, 500 ppm Long-term value: 980 mg/m³, 400 ppm	
TLV (USA)	Short-term value: 984 mg/m³, 400 ppm Long-term value: 492 mg/m³, 200 ppm BEI	
AGW (Germany)	Long-term value: 500 mg/m³, 200 ppm 2(II);DFG, Y	
· Ingredients with	biological limit values:	
67-63-0 Isopropa	nol	
BEI (USA)	40 mg/L Medium: urine Time: end of shift at end of workweek Parameter: Acetone (background, nonspecific)	
BGW (Germany)	25 mg/l Untersuchungsmaterial: Vollblut Probennahmezeitpunkt: Expositionsende bzw. Schichtende Parameter: Aceton	
	25 mg/l Untersuchungsmaterial: Urin Probennahmezeitpunkt: Expositionsende bzw. Schichtende Parameter: Aceton	
· Additional inform	nation: The lists that were valid during the creation were used as basis.	
• Exposure control • Personal protecti • General protectiv	ls	

Avoid contact with skin, eyes and clothing.

Only use protective equipment in accordance with national/ international regulations. Follow the national regulations about wearing personal protective equipment and the warranty given by the manufacturer for the safe

Printing date 10/19/2017

Reviewed on 10/18/2017

Trade name: Ivomec<sup>®</sup> Pour On (finished product)

function.

- Breathing equipment: Use suitable respiratory protective device when aerosol or mist is formed.
- · Protection of hands: Wear nitrile rubber gloves to minimize skin exposure.
- · Eye protection: Wear safety glasses with side shields for normal handling.

#### 9 Physical and chemical properties

• Information on basic physical a • General Information	nd chemical properties
· Appearance:	
Form:	Liquid
Color:	Blue
· Odor:	Like alcohol
· Change in condition	
<i>Melting point/Melting range:</i>	Undetermined.
Boiling point/Boiling range:	82 °C (180 °F)
· Flash point:	14 °C (57 °F)
· Ignition temperature:	425.0 °C (797 °F)
• Auto igniting:	Product is not self-igniting.
Danger of explosion:	Product is not explosive. However, formation of explosive air/vapor mixtures are possible.
· Explosion limits:	
Lower:	2.0 Vol %
Upper:	12.0 Vol %
· Vapor pressure at 20 °C (68 °F)	: 43 hPa (32 mm Hg)
· Specific gravity:	Not determined.
· Solubility in / Miscibility with	
Water:	Not determined.
Organic solvents:	80.0 %
Solids content:	0.5 %
• Other information	No further relevant information available.

## **10 Stability and reactivity**

- · Reactivity No further relevant information available.
- · Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No data available
- · Conditions to avoid Extremes of temperature and direct sunlight.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

US

Printing date 10/19/2017

Reviewed on 10/18/2017

# Trade name: Ivomec<sup>®</sup> Pour On (finished product)

111/1/50	city:	
	values that are releva	nt for classification:
	opropanol LD50	4570
Oral Dermal	LD50 LD50	4570 mg/kg (rat)
	LD30 LC50/4 h	13400 mg/kg (rabbit)
	7 Ivermectin Comp. E	30 mg/l (rat)
/0200-00-	Comp. B1b	514
Oral	LD50	~80 mg/kg (dog)
		25  mg/kg (mouse)
		50 mg/kg (rat)
		>24 mg/kg (Rhesus monkey)
	LD Oral	>15 mg/kg (adult human)
Dermal	LD50	406 mg/kg (rabbit)
		>660 mg/kg (rat)
Inhalation	LC50/4h	>0.4 mg/kg (rat)
	LD50	55 mg/kg (rat)
	LD50 Subcutaneous	~10 mg/kg (juvenile dog)
	LD Subcutaneous	>1.6 mg/kg (adult human)
Sensitizati Additiona The produ Irritant		ects known. ation:
on the eye Sensitizati Additiona The produ Irritant Carcinoge	on: No sensitizing effe I toxicological inform ct shows the following mic categories	ects known. ation:
on the eye Sensitizati Additiona The produ Irritant Carcinoge IARC (Int	on: No sensitizing effe I toxicological inform ct shows the following mic categories	ects known. <b>ation:</b> • dangers according to internally approved calculation methods for preparatic
on the eye Sensitizati Additiona The produ Irritant Carcinoge IARC (Int 67-63-0 I.	on: No sensitizing effe toxicological inform ct shows the following enic categories fernational Agency for	ects known. ation: • dangers according to internally approved calculation methods for preparatio <b>r Research on Cancer</b> )
on the eye Sensitizati Additional The produ Irritant Carcinoge IARC (Int 67-63-0 I NTP (Nat	on: No sensitizing effe I toxicological inform ct shows the following enic categories ernational Agency for sopropanol	ects known. ation: • dangers according to internally approved calculation methods for preparatio <b>r Research on Cancer</b> )
on the eye Sensitizati Additiona The produ Irritant Carcinoge IARC (Int 67-63-0 I. NTP (Nat None of th	on: No sensitizing effe I toxicological inform ct shows the following enic categories ernational Agency for sopropanol ional Toxicology Prog e ingredients is listed.	ects known. ation: • dangers according to internally approved calculation methods for preparatio <b>r Research on Cancer</b> )
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LC50/96 hours 3 ug/l (Rainbow Trout) LC50 / 48 hrs 0.025 ppb (Daphnia magna)

Printing date 10/19/2017

Reviewed on 10/18/2017

Trade name: Ivomec<sup>®</sup> Pour On (finished product)

- · Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- $\cdot \textit{Bioaccumulative potential No further relevant information available}.$
- $\cdot$  **Mobility in soil** No further relevant information available.
- · Results of PBT and vPvB assessment
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- · Other adverse effects No further relevant information available.

## **13 Disposal considerations**

- · Waste treatment methods
- · Recommendation: Disposal must be made according to official regulations.
- · Uncleaned packagings:
- · Recommendation: Disposal must be made according to official regulations.

UN-Number	
DOT, ADR, IMDG, IATA	UN1993
UN proper shipping name DOT, ADR, IMDG, IATA	FLAMMABLE LIQUID, N.O.S. (Isopropanol, Ivermectin)
Transport hazard class(es)	
DOT	
RAMMER LOOD	
Class	3 Flammable liquids
Label	3
ADR, IMDG, IATA	
Class	3 Flammable liquids
Label	3
Packing group	
DOT, ADR, IMDG, IATA	11
Environmental hazards:	
Marine pollutant:	Yes
Special precautions for user	Warning: Flammable liquids
Danger code (Kemler):	33

A4

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

Printing date 10/19/2017

Reviewed on 10/18/2017

Trade name: Ivomec<sup>®</sup> Pour On (finished product)

· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

· UN ''Model Regulation'':

Not applicable.

UN 1219 ISOPROPANOL, 3, II

# **15 Regulatory information**

· Safety, health and environmental regulations/legislation specific for the substance or mixture · SARA

· Section 355 (extremely hazardous substances):

None of the ingredients are listed.

· Section 313 (Specific toxic chemical listings):

67-63-0 Isopropanol

· TSCA (Toxic Substances Control Act):

67-63-0 Isopropanol

· 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.

· TLV (Threshold Limit Value established by ACGIH)

67-63-0 Isopropanol

· 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.

• GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS). · Hazard pictograms GHS02, GHS07

· Signal word Danger

· Hazard-determining components of labeling:

Isopropanol · Hazard statements

H225 Highly flammable liquid and vapor.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

· Precautionary statements

Keep away from heat/sparks/open flames/hot surfaces. No smoking. P210 P241

Use explosion-proof electrical/ventilating/lighting/equipment.

Printing date 10/19/2017

Reviewed on 10/18/2017

#### Trade name: Ivomec<sup>®</sup> Pour On (finished product)

P261	Avoid breathing dust/fume/gas/mist/vapors/spray
P280	Wear protective gloves / eye protection / face protection.
P240	Ground/bond container and receiving equipment.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P264	Wash thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.
P303+P361+P353	If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/
	shower.
P305+P351+P338	If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P312	Call a POISON CENTER/doctor if you feel unwell.
P337+P313	If eye irritation persists: Get medical advice/attention.
P370+P378	In case of fire: Use for extinction: CO2, powder or water spray.
P405	Store locked up.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P403+P235	Store in a well-ventilated place. Keep cool.
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

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

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

## **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: SDS Coordinator, msds@merial.com

· Date of preparation / last revision 10/19/2017 / -

US -

<sup>·</sup> 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) IMDG: International Maritime Code for Dangerous Goods DOT: US Department of Transportation IATA: International Air Transport Association ACGIH: American Conference of Governmental Industrial Hygienists EINECS: European Inventory of Existing Commercial Chemical Substances ELINCS: European List of Notified Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society) NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA) LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative NIOSH: National Institute for Occupational Safety OSHA: Occupational Safety & Health TLV: Threshold Limit Value PEL: Permissible Exposure Limit REL: Recommended Exposure Limit BEI: Biological Exposure Limit Flam. Liq. 2: Flammable liquids - Category 2 Acute Tox. 2: Acute toxicity - Category 2 Acute Tox. 3: Acute toxicity – Category 3 Acute Tox. 4: Acute toxicity – Category 4 Eye Irrit. 2A: Serious eye damage/eye irritation - Category 2A STOT SE 3: Specific target organ toxicity (single exposure) - Category 3