Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations Revision Date: 03/08/2016 Date of issue: 03/08/2016

SECTION 1: IDENTIFICATION

1.1. Product Identifier

Product Form: Mixture Product Name: Ivermectin Pour On

Product Code: ANADA 200-272

1.2. Intended Use of the Product

Use of the substance/mixture: Ivermectin Pour On for cattle is an ivermectin-based endectocide for the effective treatment and control of a wide range of internal and external parasites of beef and non-lactating dairy cattle.

1.3. Name, Address, and Telephone of the Responsible Party

Supplier Manufacturer **Durvet Inc** Norbrook Laboratories Ltd, PO Box 279 Station Works, Newry, Co.Down, 100 Magellan Drive N.Ireland, BT35 6JP. +44 (0)28 3026 4435 Blue Springs, MO 64014 Telephone No. Phone: 816 229 9101 Fax No. +44 (0)28 3026 1721 Fax: 816 224 3080 E-Mail: enquiries@norbrook.co.uk **Emergency Telephone Number** 1.4. **Emergency Number** : 800-424-9300

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the Substance or Mixture

GHS-US classification	
Flam. Liq. 2	H225
Acute Tox. 4 (Oral)	H302
Eye Irrit. 2A	H319
Repr. 2	H361
STOT SE 3	H336
Aquatic Acute 3	H402
Aquatic Chronic 3	H412

Full text of hazard classes and H-statements : see section 16

2.2. Label Elements

GHS-US Labeling

Hazard Pictograms (GHS-US)



Signal Word (GHS-US) Hazard Statements (GHS-US)

Precautionary Statements (GHS-US)

- : Danger
- : H225 Highly flammable liquid and vapor.
 - H302 Harmful if swallowed.
 - H319 Causes serious eye irritation.
 - H336 May cause drowsiness or dizziness.
 - H361 Suspected of damaging fertility or the unborn child.
 - H402 Harmful to aquatic life.
 - H412 Harmful to aquatic life with long lasting effects.
- : P201 Obtain special instructions before use.
 - P202 Do not handle until all safety precautions have been read and understood.
 - P210 Keep away from extremely high or low temperatures, ignition sources, and incompatible materials. No smoking.
- P233 Keep container tightly closed.
- P240 Ground/bond container and receiving equipment.
- P241 Use explosion-proof electrical, ventilating, and lighting equipment.
- P242 Use only non-sparking tools.
- P243 Take precautionary measures against static discharge.
- P261 Avoid breathing vapors, mist, or spray.
- P264 Wash hands, forearms, and other exposed areas thoroughly after handling.
- P270 Do not eat, drink or smoke when using this product.

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P271 - Use only outdoors or in a well-ventilated area.

P273 - Avoid release to the environment.

P280 - Wear protective gloves, protective clothing, and eye protection.

P301+P330+P312 - If swallowed: Rinse mouth. Call a poison center or doctor if you feel unwell.

P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P304+P340 - If inhaled: Remove person to fresh air and keep at rest in a position comfortable for breathing.

P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

P308+P313 - If exposed or concerned: Get medical advice/attention.

P337+P313 - If eye irritation persists: Get medical advice/attention.

P370+P378 - In case of fire: Use appropriate media (see section 5) to extinguish. P403+P233+P235+P405 - Store in a well-ventilated place. Keep container tightly

closed. Keep cool. Store locked up.

P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations.

2.3. Other Hazards

Exposure may aggravate those with pre-existing eye, skin, or respiratory conditions.

2.4. Unknown Acute Toxicity (GHS-US)

No data available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substance

Not applicable

3.2. Mixture

Name	Product Identifier	%	GHS-US classification
Isopropyl alcohol	(CAS No) 67-63-0	Proprietary	Flam. Liq. 2, H225 Eye Irrit. 2A, H319 STOT SE 3, H336
Ivermectin	(CAS No) 70288-86-7	Proprietary	Acute Tox. 2 (Oral), H300 Acute Tox. 3 (Dermal), H311 Repr. 2, H361 STOT SE 1, H370 STOT RE 1, H372 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Triethanolamine	(CAS No) 102-71-6	Proprietary	Not classified

The specific chemical identity and/or exact percentage of composition have been withheld as a trade secret [29 CFR 1910.1200] Full text of H-phrases: see section 16

SECTION 4: FIRST AID MEASURES

4.1. Description of First Aid Measures

First-aid Measures General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label if possible).

First-aid Measures After Inhalation: Remove to fresh air and keep at rest in a position comfortable for breathing. Obtain medical attention if breathing difficulty persists.

First-aid Measures After Skin Contact: Remove contaminated clothing. Gently wash with plenty of soap and water followed by rinsing with water for at least 15 minutes. Call a POISON CENTER or doctor/physician if you feel unwell. Wash contaminated clothing before reuse.

First-aid Measures After Eye Contact: Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do so. Continue rinsing. Obtain medical attention if irritation persists.

First-aid Measures After Ingestion: Do NOT induce vomiting. Rinse mouth. Immediately call a POISON CENTER or doctor/physician.

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4.2. Most important symptoms and effects, both acute and delayed

Symptoms/Injuries: May cause drowsiness or dizziness. Causes serious eye irritation. Harmful if swallowed. Suspected of damaging fertility or the unborn child. Please refer to the package insert for more detailed information.

Symptoms/Injuries After Inhalation: May cause drowsiness or dizziness.

Symptoms/Injuries After Skin Contact: May cause skin irritation.

Symptoms/Injuries After Eye Contact: Causes serious eye irritation. Symptoms may include: Redness, pain, swelling, itching, burning, tearing, and blurred vision.

Symptoms/Injuries After Ingestion: Harmful if swallowed. Symptoms may include: Gastrointestinal irritation. Abdominal pain. Diarrhea. Nausea. Vomiting.

Chronic Symptoms: Suspected of damaging fertility or the unborn child.

4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If you feel unwell, seek medical advice (show the label where possible).

SECTION 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing Media

Suitable Extinguishing Media: Water spray, alcohol foam, dry chemical, carbon dioxide.

Unsuitable Extinguishing Media: Do not use a heavy water stream. Use of heavy stream of water may spread fire.

5.2. Special Hazards Arising From the Substance or Mixture

Fire Hazard: Highly flammable liquid and vapor.

Explosion Hazard: May form flammable/explosive vapor-air mixture.

Reactivity: Reacts with (strong) oxidizers: (increased) risk of fire.

5.3. Advice for Firefighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire. Under fire conditions, hazardous fumes will be present.

Firefighting Instructions: Use water spray or fog for cooling exposed containers. In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Avoid all contact with skin, eyes, or clothing. Avoid breathing vapor, mist, or spray. Use special care to avoid static electric charges. Keep away from open flames, hot surfaces and sources of ignition. Use only as directed.

6.1.1. For Non-emergency Personnel

Protective Equipment: Use appropriate personal protection equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel.

6.1.2. For Emergency Responders

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedures: Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit.

6.2. Environmental Precautions

Avoid release to the environment.

6.3. Methods and Material for Containment and Cleaning Up

For Containment: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. **Methods for Cleaning Up:** Clean up spills immediately and dispose of waste safely. Absorb and/or contain spill with inert material, then place in suitable container. Use only non-sparking tools. Do not take up in combustible material such as: saw dust or cellulosic material.

6.4. Reference to Other Sections

See Heading 8. Exposure controls and personal protection. For further information refer to section 13.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for Safe Handling

Additional Hazards When Processed: Handle empty containers with care because residual vapors are flammable.

Precautions for Safe Handling: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and again when leaving work.

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7.2. Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Proper grounding procedures to avoid static electricity should be followed. Use explosion-proof electrical, ventilating, and lighting equipment.

Storage Conditions: Store in a dry, cool and well-ventilated place. Keep container closed when not in use. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep in fireproof place. Store locked up.

Incompatible Products: Strong acids, strong bases, strong oxidizers.

Storage Temperature: 25 °C Max

7.3. Specific End Use(s)

Ivermectin Pour On for cattle is an ivermectin-based endectocide for the effective treatment and control of a wide range of internal and external parasites of beef and non-lactating dairy cattle.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control Parameters

For substances listed in section 3 that are not listed here, there are no established exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), AIHA (WEEL), NIOSH (REL), or OSHA (PEL).

Triethanolamine (102-71-6)			
USA ACGIH	ACGIH TWA (mg/m ³)	5 mg/m ³	
Isopropyl alco	Isopropyl alcohol (67-63-0)		
USA ACGIH	ACGIH TWA (ppm)	200 ppm	
USA ACGIH	ACGIH STEL (ppm)	400 ppm	
USA ACGIH	ACGIH chemical category	Not Classifiable as a Human Carcinogen	
USA ACGIH	Biological Exposure Indices (BEI)	40 mg/l (Medium: urine - Time: end of shift at end of workweek -	
		Parameter: Acetone (background, nonspecific)	
USA NIOSH	NIOSH REL (TWA) (mg/m³)	980 mg/m ³	
USA NIOSH	NIOSH REL (TWA) (ppm)	400 ppm	
USA NIOSH	NIOSH REL (STEL) (mg/m ³)	1225 mg/m³	
USA NIOSH	NIOSH REL (STEL) (ppm)	500 ppm	
USA IDLH	US IDLH (ppm)	2000 ppm (10% LEL)	
USA OSHA	OSHA PEL (TWA) (mg/m³)	980 mg/m³	
USA OSHA	OSHA PEL (TWA) (ppm)	400 ppm	

8.2. Exposure Controls

Appropriate Engineering Controls : Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor or mists below the applicable workplace exposure limits indicated above. All electrical equipment should comply with the National Electric Code. Gas detectors should be used when flammable gases or vapors may be released. Proper grounding procedures to avoid static electricity should be followed. Use explosion-proof equipment. Ensure all national/local regulations are observed. : Avoid all unnecessary exposure. Gloves. Protective clothing. Protective goggles. **Personal Protective Equipment** Insufficient ventilation: wear respiratory protection. : Chemically resistant materials and fabrics. **Materials for Protective Clothing Hand Protection** : Wear chemically resistant protective gloves. **Eve Protection** : Chemical safety goggles. **Skin and Body Protection** : Wear fire/flame resistant/retardant clothing. Wash contaminated clothing before reuse : In case of inadequate ventilation, oxygen deficient atmosphere, or where exposure **Respiratory Protection** levels are not known wear approved respiratory protection. **SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES** Information on Basic Physical and Chemical Properties 9.1.

: Liquid

Physical State

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Appearance	: Clear blue solution	
Odor	: No data available	
Odor Threshold	: No data available	
рН	: No data available	
Evaporation Rate	: No data available	
Melting Point	: No data available	
Freezing Point	: No data available	
Boiling Point	: No data available	
Flash Point	: 12 °C (53.6 °F)	
Auto-ignition Temperature	: No data available	
Decomposition Temperature	: No data available	
Flammability (solid, gas)	: No data available	
Vapor Pressure	: No data available	
Relative Vapor Density at 20 °C	: No data available	
Relative Density	: No data available	
Solubility	: No data available	
Partition Coefficient: N-Octanol/Water	: No data available	
Viscosity	: No data available	
9.2. Other Information No additional information available		

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity: Reacts with (strong) oxidizers: (increased) risk of fire.

10.2. **Chemical Stability:** Stable at standard temperature and pressure.

Possibility of Hazardous Reactions: Hazardous polymerization will not occur. 10.3.

10.4. **Conditions to Avoid:** Direct sunlight. Extremely high or low temperatures. Sparks, heat, open flame and other sources of ignition.

10.5. Incompatible Materials: Strong acids, strong bases, strong oxidizers.

10.6. Hazardous Decomposition Products: Thermal decomposition generates: Carbon oxides (CO, CO₂). Nitrogen oxides.

SECTION 11: TOXICOLOGICAL INFORMATION

Information On Toxicological Effects 11.1.

Acute Toxicity: Oral: Harmful if swallowed.

Ivermectin Pour On 2,000.00 mg/kg body weight ATE (Oral) Ivermectin (70288-86-7) LD50 Oral Rat 10 mg/kg ATE (Dermal) 300.00 mg/kg body weight Triethanolamine (102-71-6) 6400 mg/kg LD50 Oral Rat LD50 Dermal Rabbit > 2000 mg/kg Isopropyl alcohol (67-63-0) 4710 mg/kg LD50 Oral Rat LD50 Dermal Rabbit 4059 mg/kg LC50 Inhalation Rat 72.6 mg/l/4h (Exposure time: 4 h) **LC50 Inhalation Rat** 72.5 mg/l/4h Skin Corrosion/Irritation: Not classified

Serious Eye Damage/Irritation: Causes serious eye irritation.

Respiratory or Skin Sensitization: Not classified

Germ Cell Mutagenicity: Not classified

Carcinogenicity: Not classified

Triethanolamine (102-71-6)

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Isopropyl alcohol (67-63-0)		
IARC group	3	
Reproductive Toxicity: Suspected o	f damaging fertility or the unborn child.	
Specific Target Organ Toxicity (Sing	se Exposure): May cause drowsiness or dizziness.	
Specific Target Organ Toxicity (Rep	eated Exposure): Not classified	
Aspiration Hazard: Not classified		
-	n: May cause drowsiness or dizziness.	
Symptoms/Injuries After Skin Cont	act: May cause skin irritation.	
Symptoms/Injuries After Eye Conta	act: Causes serious eye irritation. Symptoms may include: Redness, pain, swelling, itching,	
burning, tearing, and blurred vision.		
Symptoms/Injuries After Ingestion	: Harmful if swallowed. Symptoms may include: Gastrointestinal irritation. Abdominal pain.	
Diarrhea. Nausea. Vomiting.		
Chronic Symptoms: Suspected of da	amaging fertility or the unborn child.	
SECTION 12: ECOLOGICAL INFO	ORMATION	
12.1. Toxicity		
Ecology - General	: Harmful to aquatic life. Harmful to aquatic life with long lasting effects.	
Triethanolamine (102-71-6)		
LC50 Fish 1	10600 (10600 - 13000) mg/l (Exposure time: 96 h - Species: Pimephales promelas	
	[flow-through])	
LC 50 Fish 2	1000 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])	
ErC50 (algae)	169 mg/l	
Isopropyl alcohol (67-63-0)		
130p10py1 alcollol (07-03-0)		
LC50 Fish 1	9640 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])	
· · · · · ·	9640 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through]) 13299 mg/l (Exposure time: 48 h - Species: Daphnia magna)	
LC50 Fish 1		

EC50 Other Aquatic Organisms 2 1000 mg/l (Exposure time: 72 h - Species: Desmodesmus subspicatus)

12.2. Persistence and Degradability No additional information available

12.3. **Bioaccumulative Potential**

Triethanolamine (102-71-6)		
BCF fish 1	3.9	
Log Pow	-2.53	
Isopropyl alcohol (67-63-0)		
Log Pow	0.05 (at 25 °C)	

12.4. Mobility in Soil No additional information available

12.5. **Other Adverse Effects**

Other Information

: Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Sewage Disposal Recommendations: This material is hazardous to the aquatic environment. Keep out of sewers and waterways. Waste Disposal Recommendations: Dispose of waste material in accordance with all local, regional, national, and international regulations.

Additional Information: Handle empty containers with care because residual vapors are flammable.

SECTION 14: TRANSPORT INFORMATION

14.1. In Accordance wit	th DOT	
Proper Shipping Name	: ISOPROPANOL SOLUTION (ISOPROPYL ALCOHOL)	
Hazard Class	: 3	
Identification Number	: UN1219	
Label Codes	: 3	
Packing Group	: 11	
ERG Number	: 129	
14.2. In Accordance wi	th IMDG	
Proper Shipping Name	: ISOPROPANOL SOLUTION (ISOPROPYL ALCOHOL)	
Hazard Class	: 3	
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Identification Number	: UN1219	
Packing Group	: 11	
Label Codes	: 3	
EmS-No. (Fire)	: F-E	
EmS-No. (Spillage)	: S-D	3
14.3. In Accordance wi	th IATA	•
Proper Shipping Name	: ISOPROPANOL S	SOLUTION (ISOPROPYL ALCOHOL)
Packing Group	: 11	
Identification Number	: UN1219	
Hazard Class	: 3	
Label Codes	: 3	3
ERG Code (IATA)	: 3L	•
SECTION 15: REGULATO	DRY INFORMATION	
15.1 US Federal Regul		
Ivermectin Pour On		
SARA Section 311/312 Haza	ard Classes	Fire hazard
		Immediate (acute) health hazard
		Delayed (chronic) health hazard
Triethanolamine (102-71-6		
Listed on the United States	TSCA (Toxic Substances	Control Act) inventory
Isopropyl alcohol (67-63-0)		
Listed on the United States	TSCA (Toxic Substances	Control Act) inventory
Subject to reporting require	ements of United States ?	SARA Section 313
EPA TSCA Regulatory Flag		T - T - indicates a substance that is the subject of a Section 4 test rule
		under TSCA
SARA Section 313 - Emissio	n Reporting	1.0 % (only if manufactured by the strong acid process, no supplier
		notification)
15.2 US State Regulat	ions	
U		

Triethanolamine (102-71-6)		
U.S Massachusetts - Right To Know List		
U.S New Jersey - Right to Know Hazardous Substance List		
U.S Pennsylvania - RTK (Right to Know) List		
Isopropyl alcohol (67-63-0)		
U.S Massachusetts - Right To Know List		
U.S New Jersey - Right to Know Hazardous Substance List		
U.S Pennsylvania - RTK (Right to Know) - Environmental Hazard List		
LLC Depressivenia DTK (Dight to Know) List		

U.S. - Pennsylvania - RTK (Right to Know) List

SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Revision Date

03/08/2016 :

Other Information

:

This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

GHS Full Text Phrases:

Acute Tox. 2 (Oral)	Acute toxicity (oral) Category 2
Acute Tox. 3 (Dermal)	Acute toxicity (dermal) Category 3
Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Aquatic Acute 1	Hazardous to the aquatic environment - Acute Hazard Category 1
Aquatic Acute 3	Hazardous to the aquatic environment - Acute Hazard Category 3
Aquatic Chronic 1	Hazardous to the aquatic environment - Chronic Hazard Category 1
Aquatic Chronic 3	Hazardous to the aquatic environment - Chronic Hazard Category 3
Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
Flam. Liq. 2	Flammable liquids Category 2
Repr. 2	Reproductive toxicity Category 2
STOT RE 1	Specific target organ toxicity (repeated exposure) Category 1

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STOT SE 1	Specific target organ toxicity (single exposure) Category 1
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H225	Highly flammable liquid and vapor
H300	Fatal if swallowed
H302	Harmful if swallowed
H311	Toxic in contact with skin
H319	Causes serious eye irritation
H336	May cause drowsiness or dizziness
H361	Suspected of damaging fertility or the unborn child
H370	Causes damage to organs
H372	Causes damage to organs through prolonged or repeated exposure
H400	Very toxic to aquatic life
H402	Harmful to aquatic life
H410	Very toxic to aquatic life with long lasting effects
H412	Harmful to aquatic life with long lasting effects

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

SDS US (GHS HazCom)