

SECTION 1

: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

SECTION 1.1 : PRODUCT IDENTIFIER

PRODUCT NAME : IVERMECTIN Oral Solution 0.8mg/ml (0.08%)-All presentation Volumes

PRODUCT TYPE : MIXTURE REACH REGISTRATION : Not Available

SECTION 1.2 : RELEVANT IDENTIFIED USES, & USES ADVISED AGAINST

IDENTIFIED USES : VETERINARY; Oral Dose Parasiticide with Anthelmintic Properties for ovine ruminants

SECTION 1.3 : DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET

COMPANY NAME : Chanelle Pharmaceuticals Manufacturing Ltd.,
COMPANY ADDRESS : Dublin Road, Loughrea, Co. Galway, Rep. of Ireland

HOURS OF BUSINESS : 8.30 AM -5.00 PM (GMT)

SECTION 1.4 : EMERGENCY CONTACT INFORMATION

COMPANY TELEPHONE : +353-(0)-91-841-788 (Reception -during office hours)

COMPANY FAX : +353-(0)-91-841-303
COMPANY WEBSITE : http://www.chanellegroup.ie/

SECTION 2 : HAZARDS IDENTIFICATION

SECTION 2.1 : CLASSIFICATION OF THE SUBSTANCE/MIXTURE

CLASSIFICATION ACCORDING TO REGULATION 1272/2008/EC

Hazard Type: Category: H-Statement: Signal:

Acute Toxicity (Oral) Category 5 H303 Signal: WARNING Hazardous to the Aquatic Environment Category 3 H402 Signal: WARNING

SECTION 2.2 : LABEL ELEMENTS

	Hazard Statements	Precautionary State	ements		·
No Symbol		Prevention	Response	Storage	Disposal
- WARNING	H303: May Be Harmful if Swallowed H402: Harmful to Aquatic Life	P273: Avoid release to the environment	P312: Call a POISON CENTRE/ doctor/ physician if you feel unwell		P501: Dispose of Contents/Container in accordance with local/ regional/ national/ international regulations

SECTION 2.3 : OTHER HAZARDS

- * Refer to Section 4 for First Aid Measures
- * Refer to Section 5 regarding Thermal Decomposition
- * Refer to Section 11 for Toxicological Data
- * Refer to Section 12 for Environmental Toxicity Data



SECTION 3

: COMPOSITION/INFORMATION ON INGREDIENTS.

SECTION 3.1 : SUBSTANCE : NOT APPLICABLE

SECTION 3.2 : MIXTURE : INGREDIENTS ACCORDING TO 1272/2008/EC

COMPONENT	TYPE	CONC%	CAS	CLASSIFICATION	GHS & CLP LABEL (ingredient)
IVERMECTIN	API	0.08%	70288-86-7	Acute Tox Cat 1 (ORAL) DANGER Acute Tox Cat 3 (DERMAL) DANGER Repr Tox Cat 2 WARNING Aquatic Acute Cat 1 WARNING	H300: Fatal if Swallowed H311: Toxic in contact with Skin H361: Suspected of Damaging Fertility or The Unborn Child H400: Very Toxic to Aquatic Life
(BHA) Butylated Hydroxyanisole	Anti- Oxidant	0.01%	121-00-6	Acute Tox Cat 4 (ORAL) WARNING	H302: Harmful If Swallowed
Propyl Gallate	Anti- Oxidant	0.01%	121-79-9	Acute Tox Cat 4 (ORAL) WARNING Skin Sens Cat 1 WARNING	H302: Harmful If Swallowed H317: May Cause and Allergic Skin Reaction
Benzyl Alcohol	Preservative	2.86%	67-63-0	Acute Tox Cat 4 (ORAL) WARNING Acute Tox Cat 4 (INH) WARNING	H302: Harmful If Swallowed H332: Harmful if Inhaled

Note: All other ingredients, not listed above, are either below reportable levels, or are not classified as hazardous according to regulation.

SECTION 4 : FIRST AID MEASURES.

SECTION 4.1 : Description of First Aid Measures (First Aid Section Refers to the Finished Product Mixture)

General: If unconscious, place person on their side in the recovery position; contact medical aid; give access to this SDS.

Inhalation: If coughing, dizziness, or irritation develops remove to Fresh Air; Keep Patient Warm; Seek Medical Assistance

Skin Contact: Wash affected area with mild soap & water; if irritation develops contact physician.

Eye Contact: Rinse open eye with water for several minutes; Remove Contact Lenses if present. Seek Medical Advice

Ingestion:

Rinse Mouth with water; immediately contact medical physician/assistance showing the pack information or this SDS; Keep patient in resting position; Allow patient (if conscious) to drink water; Never administer anything to patient in an unconscious state; DO

NOT INDUCE VOMITING unless directed to do so by a medical physician; if patient loses consciousness, place in recovery position.

SECTION 4.2 : Most Important Symptoms and Effects (Acute & Delayed): This product contains ingredients which are known to induce narcosis

If Inhaled. High levels of exposure by inhalation may result in drowsiness, numbness, vomiting, headache, & narcosis

SECTION 4.3 : Indication of Any Immediate Medical Attention & Special Treatment Needed

: Notes to Physician: Treat Symptomatically. Consider use of activated charcoal slurry or laxative/ gastric lavage/ emetic therapy.

SECTION 5

: FIREFIGHTING MEASURES.

SECTION 5.1: EXTINGUISHING MEDIA

Suitable Extinguishing Media: Dry Chemical Powder; Carbon Dioxide; Foam; Water Spray; Unsuitable Extinguishing Media: Full Water Jet deemed unsuitable as it may spread the flame.

SECTION 5.2: SPECIAL HAZARDS (arising from substance/mixture)

Hazardous Thermal Decomposition Products: Possibility of Carbon Oxides (COx) and Nitrogen Oxides (NOx). Can react with strong oxidisers,

SECTION 5.3: ADVICE FOR FIREFIGHTERS

Wear self-contained respiratory protection; Wear Protective Clothing; Evacuate Area

ADDITIONAL INFORMATION Collect contaminated Fire Fighting Media, Not to be discharged to drain.

Exposure to fire may cause container to rupture or if heated under confinement



SECTION 6

: ACCIDENTAL RELEASE MEASURES.

SECTION 6.1: Personal Precautions, Protective Equipment & Emergency Procedures

For Non-Emergency Personnel: No action should be taken without appropriate training, PPE, or if danger of personal risk exists.

Do not walk through, touch or attempt to contain spilled material without PPE.

Refer to Section 8 for PPE requirements. No Smoking. Unnecessary personnel should be removed to safe area.

For Emergency Personnel: Refer to section 8 for required PPE to contain spillage.

Ensure proper containment for disposal as detailed in Section 13. Affected Area may then be cleaned with Water and Detergent.

SECTION 6.2: ENVIRONMENTAL PRECAUTIONS

Do NOT discharge spilled material to soil, sewers, waterways, surface or ground waters.

Contact relevant authorities if contamination occurs.

SECTION 6.3: MATERIALS/METHODS (for containment and clean-up)

Approach release from up-wind. Absorb spilled material with a suitable absorptive agent (E.g. Spill Kit/ Diatomaceous Earth). Label collected material appropriately and store for disposal

Referring to Section 13 for more information

SECTION 7

: HANDLING & STORAGE.

SECTION 7.1: PRECAUTIONS FOR SAFE HANDLING: (Refer to section 4 for First Aid Protocols)

Avoid contact with skin and eyes. Avoid breathing mist/vapours. DO NOT eat, drink or smoke during use of product.

Wash Hands after use. Keep container tightly closed when not in use.

FINISHED PRODUCT:

<u>For Persons administering the Product:</u> Keep all medicines away from children & pets; Children are particularly at risk from product and may prove harmful. Cats and certain breeds of Dogs can be overly susceptible to IVERMECTIN Toxicity therefore access & exposure to this product should be restricted. In all cases of accidental exposure through ingestion,

contact medical physician immediately. Avoid contact with Skin & Eyes.

under 30°C, dry, & well ventilated area. Avoid storing in direct sunlight.

SECTION 7.2:

CONDITIONS FOR SAFE STORAGE including incompatibilities; Keep all medicines stored away from children, pets and animals; Finished Product does not require any special storage conditions though it is recommended to store securely,

SECTION 7.3:

SPECIFIC END USE(s); Use ONLY as detailed in Section 1.2.

SECTION 8

: EXPOSURE CONTROLS/ PERSONAL PROTECTION.

SECTION 8.1: EXPOSURE CONTROLS: None specified; No existing Data regarding OEL for finished product;

Appropriate engineering controls should be in place where individuals are exposed to dust,

Vapours; mist; airborne particles; to ensure worker exposure are within/below any recommended limits.

ENVIRONMENTAL EXPOSURE CONTROLS: None specified; Emissions from ventilation or work processes

should meet requirements of environmental protection legislation

SECTION 8.2:

CONTROL PARAMETERS; Ensure good ventilation and/or exhaust measures within the workplace;

List of PPE is as follows: Finished Product itself requires no Respiratory Protection under Normal Conditions of Use and a well ventilated environment. A (minimum) P3 Grade Mask/FFP3 Grade Mask (EN 143) in enclosed areas recommended especially if working with bulk volumes and as a back-up to engineering controls. Gloves are required (EN 374) when handling bulk product for extended periods, wash hands thoroughly after handling product. Eye protection normally required when handling the finished product, protective eyewear (EN 166) is recommended when working with large or bulk volumes where the incidence of exposure is increased.

Respiratory Protection	Eye Protection	Hand Protection	General Protection
	(a)		
Quarter Mask Grade P3 Grade as per EN143	Safety Glasses Grade as per EN166	Protective Gloves Grade as per EN374	General Protective Garb and Safety Footwear appropriate to task



SECTION 9 : PHYSICAL & CHEMICAL PROPERTIES.

SECTION 9.1: INFORMATION ON BASIC P	INFORMATION ON BASIC PHYSICAL & CHEMICAL PROPERTIES				
	ACTIVE PHARMACEUTICAL	FINISHED PRODUCT			
APPEARANCE: Form/Colour	White/Off-White Powder	Clear, Colourless to Pale Yellow Liquid			
Odour	Mild Odour	Characteristic Scent			
Odour Threshold	Not Available	Not Available			
.pH	Not Available	Not Available			
Melting/Freezing Point	Melting: 155-157°C	Not Available			
Boiling Point (Range)	Not Available	Not Available			
Flash Point	Not Available	Not Available			
Evaporation Rate	Not Available	Not Available			
Flammability	Not Available	Not Available			
Upper/Lower Explosive Limits	Not listed as Explosive Hazard	Not Available			
Vapour Pressure	Not Available	Not Available			
Vapour Density	Not Available	Not Available			
Relative Density	Not Available	Not Available			
Solubility	Soluble: Methanol/ DCM/Acetonitrile/Acetone Insoluble: Water/Hexane	Not Available			
Partition Coefficient n-octanol/water	Not Available	Not Available			
Auto-Ignition Temperature	Not Available	Not Available			
Decomposition Temperature	Not Available	Not Available			
Viscosity	Not Available	Not Available			
Explosive properties	Not Available	Not Available			
Oxidising Properties	Not Available	Not Available			

SECTION 9.2 : OTHER INFORMATION; No other information available; Refer to Section 10

SECTION 10 : STABILITY & REACTIVITY DATA.

SECTION 10.1 : REACTIVITY : Considered Stable
SECTION 10.2 : CHEMICAL STABILITY : Stable under Normal Conditions
SECTION 10.3 : POSSIBILITY OF HAZARDOUS REACTIONS : None Listed or Known

SECTION 10.4 : CONDITIONS TO AVOID : No Specific Data (Refer to Section 7.2) Avoid Extremes of Light & Heat
SECTION 10.5 : INCOMPATIBLE MATERIALS : Strong Oxidising Agents/Strong Acids/Strong Bases, Ammonia, Peroxid

 SECTION 10.5
 : INCOMPATIBLE MATERIALS
 : Strong Oxidising Agents/Strong Acids/Strong Bases, Ammonia, Peroxides

 SECTION 10.6
 : HAZARDOUS DECOMPOSITION PRODUCTS
 : Normal Conditions NONE Known: Refer to Section 5 (fire conditions)

SECTION 111

: TOXICOLOGICAL INFORMATION.

: INFORMATION ON TOXICOLOGICAL EFFECTS

11.1.1 : Acute Toxicity

Ingredient	LD50	Species	Result
IVERMECTIN	Oral	Rat	2.0 to 50.0 mg/kg
		Mouse	25.00 mg/kg
		Dog	80.00 mg/kg
and the second second		Monkey	>24.00 mg/kg
	Dermal	Rabbit	406.00 mg/kg
Butylated Hydroxyanisole	Oral	Rat	880.00 mg/kg
Propyl Gallate	Oral	Rat	2100.00 mg/kg
Benzyl Alcohol	Oral	Rat	1230.00 mg/kg

<u>Supplementary Information</u>: The Information provided in this Table is for individual components for which Acute Toxicity Data is available at 100% concentration of that specific ingredient. Each component listed above is present in the Finished Product at the concentrations listed in <u>SECTION 3.2</u>. The European Medicines Agency (EMEA) has stated that IVERMECTIN has displayed interspecies differences in toxicity. This is clearly evident in the LD50 Result values provided as information (above). The EMEA has also stated that the DOG species data is considered to be the most conservative animal data.

For the purposes of this SDS, the Acute Toxicity Estimate (ATE) for the Finished Product is estimated using the Rat LD50 data (as worst case) and is estimated at >2,000.00mg/kg by calculation (2361.5 mg/kg) and accordingly, classification of the Finished Product within Section 2 is based on the GHS-CLP guidance based on this calculated figure. Ingredients not listed in Section 3.2 are classified as non-hazardous according to Regulation EC 1272/2008 and are exempt from inclusion in the ATE calculation.

11.1.2	: Skin Irritation/Corrosion Data	: No Available Data for Finished Product: Ingredients May Cause Skin Irritation.
11.1.3	: Eye Irritation/Damage Data	: No Available Data for Finished Product: Ingredients May Cause Eye Irritation.
11.1.4	: Respiratory &/or Skin Sensitisation Data	: No Available Data for Finished Product: Propyl Galate may cause Skin Sensitisation
11.1.5	: Germ Cell Mutagenicity	: Finished Product Not Classified. Contains no ingredient classified as Mutagenic
11.1.6	: Carcinogenicity	: Finished Product Not Classified. Contains no ingredient classified as Carcinogenic
11.1.7	: Reproductive Toxicity	: Finished Product Not Classified. Note: IVERMECTIN classified as Reproductive Hazard Cat 2 Positive in certain animal studies. Finished Product is not classified in this regard as the Final Concentration of IVERMECTIN within the Finished Product is below 1.0%
11.1.8	: STOT- Single Exposure	: No Available Data for Finished Product. NOT CLASSIFIED
11.1.9	: STOT- Repeated Exposure	: No Available Data for Finished Product. NOT CLASSIFIED
11.1.10	: Aspiration Hazard	: No Available Data for Finished Product. NOT CLASSIFIED



ACCORDING TO REGULATION (EU) 2015/830 (AMENDING (EC) 1907/2006) & (EC) 1272/2008 CLP REGULATION

SECTION 12 : ECOLOGICAL INFORMATION.

SECTION 12.1 : TOXICITY : No Available Data for Finished Product:

Ingredient	LC50	Species	Result
IVERMECTIN	Fish	Trout	3.0 µg/L
		Bluegill Sun Fish	4.8 μg/L
	Crustacean	Water Flea	0.025 μg/L
Butylated Hydroxyanisole	n/a	n/a	No Available Data
Propyl Galate	n/a	n/a	No Available Data
Benzyl Alcohol	Fish	Bluegill Sun Fish	10.00 mg/L
77	Crustacean	Water Flea	230.00 mg/L

 SECTION 12.2
 : PERSISTANCE AND DEGRADEABILITY
 : No Available Data

 SECTION 12.3
 : BIOACCUMULATIVE POTENTIAL
 : No Available Data

 SECTION 12.4
 : MOBILITY IN SOIL
 : No Available Data

 SECTION 12.5
 : RESULTS OF PBT & vPvB ASSESSMENT
 : No Available Data

SECTION 12.6 : OTHER ADVERSE EFFECTS : No Available Data: Active Ingredient considered acutely environmentally toxic

SECTION 13 : DISPOSAL CONSIDERATIONS.

SECTION 13.1 : WASTE TREATMENT METHODS; It is recommended that the product be considered hazardous waste and disposed of in

accordance with Local Authority Requirements & Regulations. Waste Products should not be disposed of untreated to drain.

SECTION 14 : TRANSPORT INFORMATION.

Please Note: Section 14 applies to the Finished Product

SECTION 14.1 : UN NUMBER : UN3082

SECTION 14.2 : UN PROPER SHIPPING NAME : Environmentally Hazardous Substance, Liquid, n.o.s. (Ivermectin)

 SECTION 14.3
 : TRANSPORT HAZARD CLASS (ES)
 : 9

 SECTION 14.4
 : PACKING GROUP
 : III

SECTION 14.5 : ENVIRONMENTAL HAZARDS : No (Refer to Section 12)

SECTION 14.6 : SPECIAL PRECAUTIONS FOR USER : No Data
SECTION 14.7 : TRANSPORT IN BULK : Not Applicable

SECTION 15 : OTHER REGULATORY INFORMATION.

SECTION 15.1 : SAFETY, HEALTH & ENVIRONMENTAL REGULATIONS/ LEGISLATION

(Specific for the substance/mixture) : Data Not Available : CHEMICAL SAFETY ASSESSMENT : Data Not Available

SECTION 16 : OTHER INFORMATION.

Document History : Version 1 (Created 11-July-2016)

Revised Sections : N/A

SECTION 15.2

<u>Prepared by</u>: Materials Safety Data Officer, Chanelle Pharmaceuticals Ltd.

<u>Abbreviations Legend</u>: Listed in alphabetical order.

ADR "Accord-Dangereuses-Route" Dangerous Goods by Road; European Agree : Intermediate Bulk Container IBC ATE : Acute Toxicity Estimate IMDG : International Maritime code for Dangerous Goods API : Active Pharmaceutical Ingredient LCSO : Lethal Concentration 50 % BCF : Bio-concentration Factor LD50 : Lethal Dose, 50% : Chemical Abstracts Service CAS LQ : Limited Quantity (stated in ADR-LQ) EINECS : European Inventory of Existing Chemical Substances MARPOL 73/78 : International Convention for the Prevention of Pollution from Ships : Emergency Schedule (Code of Emergency Labelling) **EmS** NOEC : No Observable Effect Concentration : Globally Harmonised System (of Classification and Labelling of Chemicals) GH5 N.O.5 : "Not Otherwise Specified" IATA : International Air Transport Association

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Material Safety Data Officer

Date of Approval: //- 07 - 20/6

Prepared by: