ISSUED: 7 April 2016

SAFETY DATA SHEET

Section 1: IDENTIFICATION of CHEMICAL PRODUCT and COMPANY

Product Name:	**Erymicin 200 Injection**
Product Code:	502090 (100 mL)
Recommended Use:	An injectable antibiotic for the treatment of organisms sensitive to erythromycin in cattle, sheep, lambs and pigs.
Restrictions on Use:	For animal treatment only.
Company Identification:	Jurox Pty Limited
Address:	85 Gardiner Street, Rutherford, NSW 2320, Australia
Email:	jenq@jurox.com.au
Customer Centre:	1800 023 312
National Poisons Information Centre:	13 1126 (Australia-wide)
Emergency Telephone Number:	1800 023 312 (9am – 5pm, Monday to Friday)

Section 2: HAZARDS IDENTIFICATION

Hazard Classifications: This product has been assessed according to GHS and is classified as follows:

GHS Category	Hazard code	Hazard Statement
Flammable Liquid Category 2	H225	Highly flammable liquid and vapour
Eye Irritation Category 2A	H319	Causes serious eye irritation
Respiratory Sensitizer Category 1	H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled
Skin Sensitizer Category 1	H317	May cause an allergic skin reaction

Signal word: DANGER

GHS Pictograms:

Flame | Health Hazard | Exclamation mark

Precautionary statements:

Prevention
P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P233 Keep container tightly closed.
P241 Use explosion-proof electrical equipment.
P242 Use only non-sparking tools.
P243 Take precautionary measures against static discharge.
P280 Wear protective gloves and eye protection.

P264 Wash hands thoroughly after handling.
P261 Avoid breathing vapours.
P285 In case of inadequate ventilation wear respiratory protection.
P272 Contaminated work clothing should not be allowed out of the workplace.

Response
P303 + P361 + P353 IF ON SKIN (or hair): Remove immediately all contaminated clothing. Rinse skin with water/shower.
P333 + P313 If skin irritation or rash occurs: Get medical advice.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313 If eye irritation persists: Get medical advice/attention.
P304 + P341 IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
P342 + P311 If experiencing respiratory symptoms: Call a POISON CENTRE or doctor.
P363 Wash contaminated clothing before reuse.

Storage
P403 + P235 Store in a well-ventilated place. Keep cool.

Disposal
P501 Dispose of unused product in accordance with local regulations. Dispose of empty container by wrapping with paper and placing in garbage.

Section 3: COMPOSITION / INFORMATION on INGREDIENTS

INGREDIENT	CAS No.	CONTENT
Erythromycin	114-07-8	20%
Ethyl acetate	141-78-6	10 – 30%
Ethanol	64-17-5	< 40%
Ingredients not contributing to the hazards	-	10 – 30%

Section 4: FIRST AID MEASURES

General Information: Never give fluids or induce vomiting if a patient is unconscious or convulsing regardless of cause of injury. If medical advice/attention is needed, have this SDS, product container or label at hand.

Symptoms and Effects of Exposure: Symptoms and effects of exposure will be the same as for alcohol intoxication - impaired vision, co-ordination and reaction time, emotional instability, slurred speech, confusion, inco-ordination, disturbances in perception and senses, possible blackouts, flushing, fast heart rate, sweating and incontinence. Central nervous system depression may progress to coma.

Inhalation: If fumes, aerosols or combustion products are inhaled remove from contaminated area. If respiratory symptoms occur, remove patient to fresh air. Lay patient down and keep warm and rested. If breathing is shallow or has stopped, ensure airway is clear and apply resuscitation. If breathing is difficult, give oxygen and seek medical assistance immediately.

Ingestion: IF SWALLOWED, DO NOT INDUCE VOMITING. For advice, contact a Poisons Information Centre or a doctor. Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink. Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious. If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration. Observe the patient carefully.

Injection: Treat as for needle stick injury. Wash area well and disinfect. If other symptoms become evident, seek medical advice.

Skin: If skin contact occurs: Immediately remove all contaminated clothing, including footwear. Flush skin and hair with running water (and soap if available). Seek medical attention in event of irritation.

Eye: If eye contact occurs: Immediately flush the eye continuously with running water. Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids. Continue flushing for at least 20 minutes. If eye irritation persists, get medical advice/attention.

Recommended First Aid Facilities: Ready access to running water and soap is required. Accessible eyewash is required.

Section 5: FIRE FIGHTING MEASURES

Flash Point: < 0.0°C

Hazardous Combustion Products: If involved in a fire, may emit noxious and irritant fumes.

Extinguishing Media: There is no restriction on the type of extinguisher which may be used. Use extinguishing media suitable for surrounding area.

Protective Equipment: Protective gloves and breathing apparatus.

HAZCHEM Code: •3YE

Section 6: ACCIDENTAL RELEASE MEASURES

Spills and Disposal: Exclude non-essential people from the area. Remove all ignition sources. Wear gloves, safety glasses / goggles and appropriate protective clothing. For small spills, clean up spilled product then wipe area and put empty container in garbage. For large spills, Prevent spillage from entering drains or water courses and call emergency services.

Protective Clothing: For appropriate personal protective equipment see section 8.

Environmental Precautions: Prevent from entering drains, waterways or sewers. If spill does enter waterways contact local authority.

Section 7: HANDLING AND STORAGE

Handling: Avoid accidental self-injection. Avoid contact with skin, eyes and inhalation of vapours. Use personal protective equipment as required. Do not eat, drink or smoke while handling product. Wash hands after use.

Storage: Keep out of reach of children. Store below 30ºC (room temperature). Protect from light. Store in flame-proof area.

Other Information: Avoid contact with incompatible substances as listed in Section 10. Always read the label before use.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

This SDS describes personal protective measures relating to long term industrial and manufacturing exposure and emergency situations, such as accidents and spills. See product label for personal protective measures during normal use of the marketed product.

Exposure Limits: No exposure limits have been assigned for this product. Known exposure limits for ingredients are as follows:

Occupational Exposure Limits (OEL):

INGREDIENT	Source	TWA	STEL
Ethyl acetate	Australian Exposure Standards	720mg/m^3 / 200ppm	1440mg/m^3 / 400ppm
Ethanol	Australian Exposure Standards	1880mg/m^3 / 1000ppm	Not available

Emergency Limits:

INGREDIENT	TEEL-1	TEEL-2	TEEL-3
Ethyl acetate	400 ppm	400 ppm	10000 ppm
Ethanol	Not available	Not available	Not available

Engineering Controls: No special ventilation requirements are normally necessary for this product. However, minimise the creation of dusts and make sure that the work environment remains clean.

Personal Protective Equipment (PPE):

Eye protection: Protective glasses or goggles are recommended when handling bulk quantities of this product.

Skin protection: When handling bulk product, prevent skin contact by wearing chemical protective gloves e.g. PVC.

Respiratory protection: Not required for the normal use of this product.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Clear, light yellow liquid

Odour: Alcohol odour

Odour threshold: Not available

pH: Not available

Melting Point: Not available

Boiling Point: Not available

Flash Point: < 0.0°C

Evaporation Rate: Not available

Flammability: Highly flammable

Upper flammability limits: Not available

Lower flammability limits: Not available

Vapour Pressure: Not available

Vapour density: Not available

Relative density: Approx 0.98

Specific Gravity: Not available

Solubility in Water: Immiscible

Partition coefficient: Not available

Auto-ignition temperature: Not available

Decomposition temperature: Not available

Viscosity: Not available

Section 10: STABILITY AND REACTIVITY

Reactivity: This product is unlikely to react or polymerise under normal storage conditions.

Stability: When stored appropriately this product should show no significant degradation within the expiry period shown on the label.

Conditions to Avoid: Extreme temperatures. Heat, sparks, open flames, hot surfaces etc.

Incompatible Materials: Oxidising agents.

Hazardous Decomposition Products: No data available.

Section 11: TOXICOLOGICAL INFORMATION

Acute Toxicity:
Ingestion: No data for the mixture is available. Based on available data for the ingredients, the mixture is not considered to be acutely toxic by the oral route.

Erythromycin: Oral (mouse) LD_{50}: 2580 mg/kg;
Ethyl acetate: Oral (mouse) LD_{50}: 4100 mg/kg;
Ethanol: Oral (mouse) LD_{50}: 3450 mg/kg.

Inhalation: No data for the mixture is available. Based on available data for the ingredients, the mixture is not considered to be acutely toxic by the inhalation route.

Ethyl acetate: Inhalation (mouse) LC_{50}: 45,000 mg/m^3;
Ethanol: Inhalation (mouse) LC_{50}: 39000mg/m^3.

Dermal: No data for the mixture is available. Based on available data for the ingredients, the mixture is not considered to be acutely toxic by the dermal route.

Ethyl acetate: Dermal (mouse) LD_{50}: > 20 mL/kg;
Ethanol: Dermal (rabbit) LDLo: 20,000 mg/kg.

Injection:

Erythromycin: Subcutaneous (mouse) LD_{50}: 1800 mg/kg, Intramuscular (mouse): LD_{50} 394 mg/kg, Intraperitoneal (mouse) LD_{50}: 280 mg/kg, Intravenous (mosue) LD_{50}: 426 mg/kg;
Ethyl acetate: Subcutaneous (guinea pig) LD_{50}: 3000 mg/kg, Intraperitoneal (mouse) LD_{50}: 709 mg/kg;

Skin Corrosion / Irritation: No data for the mixture is available. Based on available data for the ingredients, the mixture is not considered to be a skin irritant. Due to the presence of ethanol and ethyl acetate, repeated exposure may cause skin cracking, flaking or drying following normal handling and use.

Serious Eye Damage / Irritation: No data for the mixture is available. Based on available data for the ingredients, the mixture is classified as an eye irritant. Ethyl acetate produces a high level of eye discomfort and is capable of causing pain and severe conjunctivitis. Corneal injury may develop, with possible permanent impairment of vision, if not promptly and adequately treated. Direct contact of the eye with ethanol (alcohol) may cause an immediate stinging and burning sensation, with reflex closure of the lid, and a temporary, tearing injury to the cornea together with redness of the conjunctiva. Discomfort may last 2 days but usually the injury heals without treatment.

Respiratory or Skin Sensitisation: No data for the mixture is available. Based on available data for the ingredients, the mixture is classified as both a respiratory sensitiser and a skin sensitiser. Exposure to erythromicin may induce hypersensitivity reactions in some individuals. Anaphylactic shock and skin rash may occur.

Germ Cell Mutagenicity: No data for the mixture is available. Based on available data for the ingredients, the mixture is not considered to be mutagenic.

Carcinogenicity: No data for the mixture is available. Based on available data for the ingredients, the mixture is not considered to be carcinogenic.

Reproductive Toxicity: No data for the mixture is available. Based on available data for the ingredients, the mixture is not considered to be a reproductive toxicant.

STOT: Single exposure: No data for the mixture is available. Based on available data for the ingredients, the mixture is not considered to be a specific target organ toxicant after single exposure.

STOT: Repeat exposure: No data for the mixture is available. Based on available data for the ingredients, the mixture is not considered to be a specific target organ toxicant after single exposure.

Aspiration hazard: Due to the presence of ethyl acetate, any material aspirated during vomiting may produce lung injury. Adverse effects of aspiration into the lungs may be delayed up to 48 hours.

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity: Thiopentone sodium is harmful in the aquatic environment.

Fish
Thiopentone sodium: LC_{50} (96h): 26.2 mg/L.

Crustacea
No data.

Algae and other aquatic plants
No data.

Ingredient	Persistence: Water/Soil	Persistence: Air	Bioaccumulation	Mobility
Thiopentone sodium	No data	No data	No data	No data

Section 13: DISPOSAL INFORMATION

Product Disposal: Dispose of product only by using according to label or at an approved landfill.

Container Disposal: Dispose of container by wrapping with paper and placing in garbage.

Section 14: TRANSPORT INFORMATION

Dangerous Goods Classification: Classified as a Dangerous Good according to the criteria of the Australian Dangerous Goods (ADG) Code (land), the IATA Dangerous Goods Regulations (air) and the IMDG Code (sea).

Proper Shipping Name: FLAMMABLE LIQUID, N.O.S. (contains ethyl acetate and ethanol)

UN Number: 1993

Transport Hazard Class: 3

Packing Group: II

HAZCHEM Code: •3YE

Marine pollutant: NO

Section 15: REGULATORY INFORMATION

Poison Schedule (SUSMP): S4

APVMA No.: 52668

AICS: All of the significant ingredients in this formulation are compliant with NICNAS regulations.

Section 16: OTHER INFORMATION

This information is based on data believed by Jurox Pty Limited to be accurate at the time of writing but is subject to change without notice. It is given in good faith, but no warranty expressed or implied is made as to its accuracy, completeness otherwise and no assumption of liability from howsoever arising is made by Jurox Pty Limited by reason of the provision of this information. Every person dealing with the materials referred to herein does so at his/her own risk absolutely and must make independent determinations of suitability and completeness of information from all sources to ensure their proper use.

Legend:

ADG Code	Australian Dangerous Goods Code.
AICS	Australian Inventory of Chemical Substances.
CAS No.	Chemical Abstracts Service Registry Number.
EC_{50}	The median effect concentration, being a statistically derived concentration of a substance that can be expected to cause an adverse reaction in 50% of organisms or a 50% reduction in growth or in the growth rate of organisms.
GHS	Globally Harmonized System of Classification and Labelling of Chemicals.
Hazchem Code	Emergency action code of numbers and letters that provide information to emergency services especially firefighters.
IATA	International Air Transport Association.
IMDG Code	International Maritime Dangerous Goods Code.
KOC	Soil-Water Partition Coefficient. The ratio of a chemical's concentration that is adsorbed in the soil to the concentration of chemical in solution.
KOW	Octanol Water Partition Coefficient. The ratio of a compound's concentration in a known volume of n-octanol to its concentration in a known volume of water after the octanol and water have reached equilibrium.
LC_{50}	The median lethal concentration, being a statistically derived concentration of a substance that can be expected to cause death in 50% of animals.
LD_{50}	The median lethal dose, being a statistically derived single dose of a substance that can be expected to cause death in 50% of animals.
LDLo	Lethal Dose Low. The lowest published lethal dose.
NICNAS	National Industrial Chemicals Notification and Assessment Scheme.
NOEC	No-observable-effect-concentration.
N.O.S.	Not Otherwise Specified.
PPE	Personal Protective Equipment.
PVC	Polyvinyl chloride.
SDS	Safety Data Sheet.
STOT	Specific Target Organ Toxicity.
SUSMP	Standard for the Uniform Scheduling of Medicines and Poisons.
SWA	Safe Work Australia.

References:

ChemID Plus

EPA New Zealand Chemical Classification and Information Database (CCID)

HSDB (Hazardous Substances Data Bank)

This version issued: 7 April 2016 and is valid for 5 years from this date.

Supercedes: This SDS supercedes the version issued on 22 June 2011.

Revision History:

Date of Revision	Reason
7 April 2016	GHS classification and update of SDS to comply with SWA Code of Practice. Addition of flashpoint data.

END OF SDS