ISSUED: **31 July 2017**

SAFETY DATA SHEET

Section 1: IDENTIFICATION of CHEMICAL PRODUCT and COMPANY

Product Name: **Eradicator Pour-On Lousicide for Sheep**

Product Code: 520390 (20 L)

Recommended Use: Lousicide for sheep.

Restrictions on Use: For animal treatment only.

Company Identification: Jurox Pty Limited

Address: 85 Gardiner Street,
Rutherford, NSW 2320,
Australia

Email: customerservice@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 4	H227	Combustible liquid
Skin corrosion / Irritation Category 2	H315	Causes serious skin irritation
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**
Reproductive Toxicant Category 1B	H360	May damage fertility or the unborn child
Specific target organ toxicity (STOT) – single exposure Category 3 (respiratory tract irritation)	H335	May cause respiratory irritation
Specific target organ toxicity (STOT) – single exposure Category 3 (narcotic effects)	H336	May cause drowsiness or dizziness
Acute Aquatic Hazard Category 2	H401	Toxic to aquatic life
Chronic Aquatic Hazard Category 2	H411	Toxic to aquatic life with long lasting effects

** Limited evidence*

Signal word: DANGER

Section 2: HAZARDS IDENTIFICATION (cont.)

GHS Pictograms:


Exclamation mark


Health hazard


Aquatic pollutant

Precautionary statements:

Prevention
P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.
P103 Read label before use.
P201 Obtain special instructions before use.
P210 Keep away from heat/sparks/open flames/hot surfaces – No smoking.
P261 Avoid breathing mist/vapours/spray.
P271 Use only outdoors or in a well-ventilated area.
P285 In case of inadequate ventilation wear respiratory protection.

Response
P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P308 +P313 IF exposed or concerned: Get medical advice/attention.
P342 + P311 If experiencing respiratory symptoms: Call a POISON CENTRE or doctor/physician.
P362 Take off contaminated clothing and wash before reuse.
P370 + P378 In case of fire: Use alcohol resistant foam or normal protein foam for extinction.
P305 + P351 + P388 IF IN EYES: Rinse cautiously with water for several minutes: Remove contact lenses, if present and easy to do. Continue rinsing.

Storage
P403 + P235 Store in a well-ventilated place. Keep cool.
P405 Store locked up.

Disposal
P501 Triple-rinse container and dispose of rinsate in compliance with relevant local, state or territory government regulations. Do not dispose of undiluted chemicals on-site. If the container has the ***drum****MUSTER* logo visible, and has been thoroughly cleaned and dried, and is free of any visible residues, it can be recycled at any ***drum****MUSTER* collection or similar container management program site. The cap should not be replaced, but may be recycled separately with the container. If not recycling, break, crush, or puncture container and deliver to an approved waste management facility. If an approved waste management facility is not available, bury the broken, crushed or punctured containers 500 mm below the surface in a disposal pit specifically marked and set up for this purpose clear of waterways, vegetation and tree roots, in compliance with relevant local, state or territory government regulations. Do not burn empty containers or product.

Section 3: COMPOSITION / INFORMATION on INGREDIENTS

INGREDIENT	CAS No.	CONTENT
Dipropylene glycol methyl ether (SOLVENON)	34590-94-8	>60%
N-methyl-2-pyrrolidone	872-50-4	30 - 40%
Imidacloprid	138261-41-3	<10%
Ingredients not contributing to the hazards	-	<1%

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: The most likely effect from unprotected use of the packaged product is eye irritation. In relation to the bulk product, imidacloprid is a nicotinic acetylcholine receptor inhibitor and could produce nicotine-like effects.

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. 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.

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.

Advice to Doctor: Treat symptomatically. For neonicotinoid intoxications, no specific antidotes are known.

Section 5: FIRE FIGHTING MEASURES

Flash Point: > 75°C.

Hazardous Combustion Products: If involved in a fire, may emit noxious and irritant fumes, including carbon dioxide (C02), nitrogen oxides and other pyrolysis products typical of burning material.

Extinguishing Media: Foam, dry chemical powder, BCF (where regulations permit), carbon dioxide. For large fires only – water spray or fog.

Protective Equipment: Protective gloves and breathing apparatus. For large fires, full body protective clothing and breathing apparatus.

HAZCHEM Code: ●3Z.

Section 6: ACCIDENTAL RELEASE MEASURES

Spills and Disposal: Wear gloves and appropriate protective clothing. For small spills, clean up spilled product then wipe area and put empty container in garbage. For large spills, exclude non-essential people from the area. No smoking, naked lights or ignition sources. Prevent spillage from entering drains or water courses and call emergency services.

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

Section 6: ACCIDENTAL RELEASE MEASURES (cont.)

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

Section 7: HANDLING AND STORAGE

Handling: Handle this product to avoid exposure, taking all recommended precautions. Avoid contact with skin, eyes and inhalation of vapours. Do not allow clothing wet with material to stay in contact with skin. Use personal protective equipment as required. Do not eat, drink or smoke while handling product. Do not enter confined spaces until atmosphere has been checked.

Storage: Keep out of reach of children. Store below 30°C (room temperature). Protect from light. Store in original container, tightly closed in a cool, dry well-ventilated place. DO NOT re-use the container. Store away from foodstuff containers.

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:

INGREDIENT	TEEL-1	TEEL-2	TEEL-3
Dipropylene glycol methyl ether (SOLVENON)	150 ppm	1700 ppm	9900 ppm
N-methyl-2-pyrrolidone	30 ppm	32 ppm	190 ppm

Engineering Controls: Handle in a well ventilated area. Ensure that the work environment remains clean.

Personal Protective Equipment (PPE):

Eye protection: Safety glasses with side shields or chemical goggles are recommended when handling this product.

Skin protection: Prevent skin contact by wearing chemical protective gloves e.g. PVC, overalls and safety footwear or gumboots e.g. rubber.

Respiratory protection: Use only outdoors or in a well-ventilated area. In case of inadequate ventilation wear respiratory protection. Breathing apparatus is recommended when handling the bulk product.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Clear red liquid	**Flash Point:**	> 75°C (85°C for dipropylene glycol methyl ether)
Odour:	Ether - like		
Odour threshold:	Not available	**Evaporation Rate:**	Not available
pH:	Not available	**Flammability:**	Combustible
Melting Point:	Not applicable	**Upper flammability limits:**	Not available
Boiling Point:	Not available		

Section 9: PHYSICAL AND CHEMICAL PROPERTIES (cont.)

Lower flammability limits:	Not available	**Solubility in Water:**	Miscible
Vapour Pressure:	Not available	**Partition coefficient:**	Not available
Vapour density:	0.994	**Auto-ignition temperature:**	Not available
Relative density:	Not applicable	**Decomposition temperature:**	Not available
Specific Gravity:	1.08 – 1.10	**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. Unstable in the presence of incompatible materials (see below).

Conditions to Avoid: Avoid sources of ignition.

Incompatible Materials: Oxidising agents, strong acids and bases.

Hazardous Decomposition Products: Decomposition products include carbon dioxide ($C0_2$) and nitrogen oxides.

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.

Dipropylene glycol methyl ether (SOLVENON)	Oral (rat) LD_{50}: 5135 mg/kg
N-methyl-2-pyrrolidone	Oral (rat) LD_{50}: 3914 mg/kg
Imidacloprid	Oral (rat) LD_{50}: 410 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.

Dipropylene glycol methyl ether (SOLVENON)	No data
N-methyl-2-pyrrolidone	Inhalation (rat) LC_{50}: 8300 ppm/4h
Imidacloprid	No data

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.

Dipropylene glycol methyl ether (SOLVENON)	Dermal (rat) LD_{50}: >19020 mg/kg
N-methyl-2-pyrrolidone	Dermal (rat) LD_{50}: >5000 mg/kg
Imidacloprid	Dermal (rat) LD_{50}: >5000 mg/kg

Skin Corrosion / Irritation: No data for the mixture is available. Based on available data for the ingredients, the mixture is classified as **Skin corrosion / Irritation Category 2**. N-methyl-2-pyrrolidone is moderately irritating to human skin.

Serious Eye Damage / Irritation: No data for the mixture is available. Based on available data for the ingredients, the mixture is classified as **Eye Irritation Category 2A**. N-methyl-2-pyrrolidone has been shown to be a moderate eye irritant in rabbit studies.

Respiratory or Skin Sensitisation: No data for the mixture is available. Based on available data for the ingredients, there is limited evidence that the product should be classed as a **Respiratory Sensitiser Category 1** - may cause allergy or asthma symptoms or breathing difficulties if inhaled**.**

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 classified as a **Reproductive Toxicant Category 1B**. Reductions in the male and female fertility indices have been seen in multi-generation studies on N-methyl-2-pyrrolidone in rats. Developmental toxicity has been manifested as resorptions, malformations, reduced litter size, reduced postnatal survival and reduced pup body weight in experimental animals.

STOT: Single exposure: No data for the mixture is available. Based on available data for the ingredients, the mixture is classified by GHS criteria as a **Specific target organ toxicity (STOT) – single exposure Category 3** (due to causing respiratory tract irritation and having narcotic effects).

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 repeat exposure. Animal studies have shown that long term exposure to high doses of dicyclanil can affect the blood and haematopoietic system.

Aspiration hazard: No data available.

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity: No data for the mixture is available. Based on available data for the ingredients, the mixture is classified as **Acute Aquatic Hazard Category 2, Chronic Aquatic Hazard Category 2**. Imidacloprid is toxic to the aquatic environment, the soil environment, terrestrial vertebrates and invertebrates.

Fish
Dipropylene glycol methyl ether (SOLVENON): LC_{50} (96h): 1307.253 mg/L;
N-methyl-2-pyrrolidone: LC_{50} (96h): 464mg/L;
Imidacloprid: LC_{50} (96h): >83 mg/L.

Crustacea
Dipropylene glycol methyl ether (SOLVENON): EC_{50} (48h): 1930 mg/L;
N-methyl-2-pyrrolidone: EC_{50} (48h): approx.4897 mg/L; NOEC (504h): 12.5 mg/L;
Imidacloprid: EC_{50} (48h): 0.003 mg/L, NOEC (96h): 0.1 mg/L

Algae and other aquatic plants
Dipropylene glycol methyl ether (SOLVENON: EC_{50} (72h): >969mg/L, NOEC (72h): 969 mg/L;
N-methyl-2-pyrrolidone: EC_{50} (72h): >500 mg/L, EC_{50} (90h): >500 mg/L
Imidacloprid: EC_{50} (96h): 16.796 mg/L.

Ingredient	Persistence: Water/Soil	Persistence: Air	Bioaccumulation	Mobility
Dipropylene glycol methyl ether (SOLVENON)	HIGH	HIGH	LOW (BCF = 100)	LOW (KOC = 10)
N-methyl-2-pyrrolidone:	LOW	LOW	LOW (BCF = 0.16)	HIGH (KOC = 20.94)
Imidacloprid	HIGH	HIGH	LOW (LogKOW = 1.4496)	LOW (LogKOW = 5048)

Section 13: DISPOSAL INFORMATION

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

Container Disposal: Crush or puncture and bury in an approved landfill if an approved recycling system is not available.

Section 14: TRANSPORT INFORMATION

RAIL/ROAD:	**UN Number:**	3082
	Proper Shipping Name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains imidacloprid)
	DG Class:	9 (No subrisk)
	Packing Group:	III
	Environmental hazard	Environmentally hazardous
	Special precautions for user	Special provisions: 274, 331, 335, 375, AU01; Limited quantity: 5 L
SEA (IMDG Code):	**UN Number:**	3082
	Proper Shipping Name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains imidacloprid)
	IMDG Class:	9 (No subrisk)
	Packing Group:	III
	Environmental hazard:	Marine pollutant
	Special precautions for user	EMS Number: F-A, S-F Special provisions: 274, 335, 969 Limited quantity: 5 L
AIR (ICAO/IATA):	**UN Number:**	3082
	Proper Shipping Name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains imidacloprid)
	ICAO/IATA Class:	9 (No subrisk)
	Packing Group:	III
	Marine Pollutant:	No
	Special precautions for user	Special provisions: A97 A158 A197 Cargo Only Packing Instructions 964 Cargo Only Maximum Qty/Pack 450 L Passenger and Cargo Packing Instructions 964 Passenger and Cargo Maximum Qty/Pack 450 L Passenger and Cargo Limited Quantity Packing Instructions Y964 Passenger and Cargo Limited Maximum Qty/Pack 30 kg G

Section 15: REGULATORY INFORMATION

Poison Schedule (SUSMP): S5

APVMA No.: 81540

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.

Section 16: OTHER INFORMATION (cont.)

Legend:

BCF	Bioconcentration Factor
BCF	Bromochlorodifluoromethane
CAS No.	Chemical Abstracts Service Registry Number.
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.
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.
IATA	International Air Transport Association
ICAO	International Civil Aviation Organization
IMDG Code	International Maritime Dangerous Goods Code
KOC	Soil Adsorption Coefficient (Kd)*100/% Organic carbon. [Soil Adsorption Coefficient (Kd) = Concentration of chemical in soil / Concentration of chemical substance in water]. A very high value means a substance is strongly adsorbed onto soil and organic matter and does not move throughout the soil.
logKOW	The logarithm of the Octanol – Water Partition Coefficient. It is a relative indicator of the tendency of an organic compound to absorb to soil and living organisms.
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.
NOEC	No-observable-effect-concentration.
PPE	Personal Protective Equipment.
ppm	Parts per million
PVC	Polyvinyl chloride.
SDS	Safety Data Sheet.
STOT	Specific Target Organ Toxicity.
SUSMP	Standard for the Uniform Scheduling of Medicines and Poisons.
TEELs	Temporary Emergency Exposure Limits. Guidelines designed to predict the response of members of the general public to different concentrations of a chemical during an emergency response incident.
TEEL-1	The airborne concentration of a substance above which it is predicted that the general population, including susceptible individuals, could experience notable discomfort, irritation, or certain asymptomatic, non-sensory effects. However, these effects are not disabling and are transient and reversible upon cessation of exposure.
TEEL-2	The airborne concentration of a substance above which it is predicted that the general population, including susceptible individuals, could experience irreversible or other serious, long-lasting, adverse health effects or an impaired ability to escape.
TEEL-3	The airborne concentration of a substance above which it is predicted that the general population, including susceptible individuals, could experience life-threatening adverse health effects or death.
UN Number	United Nations number. A four digit number used to identify hazardous chemicals or classes of hazardous materials worldwide.

References:

ChemID Plus

EPA New Zealand Chemical Classification and Information Database (CCID)

HSDB (Hazardous Substances Data Bank)

This version issued: 31 July 2017 and is valid for 5 years from this date.

Supercedes: This is the first SDS for this product.

Revision History:

Date of Revision	Reason

END OF SDS