



### Section 1 – Identification of the substance/preparation and the company

**Product Name** : Epripor X  
**Company** : Donaghys Ltd  
**Address** : 16 Sheffield Crescent  
PO Box 20 449  
Christchurch  
**Telephone Number** : 0800 942 006  
**Manufacturer Product Code** : AECA0065  
**ACVM No** : A010357  
**Recommended Use** : Broad spectrum pour-on endectocide for cattle- for the treatment & control of all gastrointestinal roundworms, lungworms and sucking lice in Cattle

### Section 2 – Hazard Identification

#### Hazard Classes



6.3A Causes skin irritation  
6.4A Causes serious eye irritation  
6.8A May damage fertility or the unborn child  
6.8C May cause harm to breast fed children  
9.1A Very toxic to aquatic life with long lasting effects  
9.1C Harmful to aquatic life with long lasting effects  
9.2C Harmful to the soil environment  
9.3C Harmful to terrestrial vertebrates  
9.4A Very toxic to terrestrial invertebrates

#### Prevention statements

P103 Read label before use  
P201 Obtain special instructions before use.  
P202 Do not handle until all safety precautions have been read and understood.  
P260 Do not breathe mist/vapours/spray.  
P263 Avoid contact during pregnancy/while nursing.  
P264 Wash thoroughly after handling.  
P270 Do not eat, drink or smoke when using this product.  
P273 Avoid release to the environment.  
P280 Wear protective gloves/protective clothing/ eye protection.  
P281 Use personal protective equipment as required.

**EPA NZ Approval Code** : HSR100069

**Signal word** : DANGER

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### Section 3 – Composition Information

**Substance/Mixture:** Mixture

Chemical Entity	CAS No.	Content (w/v %)
1-Methyl-2-pyrrolidone	872-50-4	>=10 to <20
Eprinomectin	123997-26-2	>=2.5 to <10
2,6-Di-tert-butyl-p-cresol	128-37-0	>=1.0 to <2.5

### Section 4 – First Aid Measures

<b>If Swallowed</b>	: Immediately call a POISON CENTRE or doctor/physician. Have product container or label on hand.
<b>If in eyes</b>	: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so, continue rinsing. Get medical advice/attention.
<b>If on skin</b>	: Wash with plenty of soap and water. Take off contaminated clothing. If skin irritation persists: Get medical advice/attention.
<b>If Inhaled</b>	: Remove to fresh air. Get medical advice/attention.
<b>If exposed or concerned</b>	: Get medical advice/attention.
<b>Advice to Doctor</b>	: No information available

**POISON CENTRE CONTACT: 0800 764 766 (National Poisons Information Centre)**

### Section 5 – Fire-fighting Measures

<b>Special Protective Equipment</b>	: Self contained breathing apparatus, face shield or protective goggles, and neoprene rubber gloves and boots
<b>Suitable extinguishing Media</b>	: Use water Spray, alcohol resistant foam, dry chemical powder or carbon dioxide
<b>Not suitable extinguishing Media</b>	: High volume water jet
<b>Special Fire Fighting Methods</b>	: Prevent fire extinguishing water from contaminating surface water or the ground water system
<b>Specific hazards during fire-fighting</b>	: Fire may cause evolution of: Carbon monoxide (CO) Carbon dioxide (CO <sub>2</sub> )

### Section 6 – Accidental Release Measures

<b>Personal precautions , protective equipment and emergency procedures</b>	: Use personal protective equipment. Use with adequate ventilation. No special precautions required.
<b>Environmental Precautions:</b>	: Do not flush into surface water or sanitary sewer system
<b>Methods and</b>	: Suppress (knock down) gases/vapours/mists with a water

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**materials for containment and cleaning up**

spray jet. Soak up with inert absorbant material (e.g.sand, silica gel, acid binder, universal binder, saw dust) Place in closed containers.  
Label for proper disposal.

**Section 7– Handling and Storage**

**Advice on protection against fire and explosion**

: No special protective measures against fire required.

**Advice on safe handling**

: Industrial uses: Avoid formation of aerosol. Use with local exhaust ventilation. Avoid contact with skin, eyes and clothing.

**Hygiene measures**

: Cleanliness Guidelines (GMP) for manufacturing of drugs must be observed.

**Conditions for safe storage**

: For storage suitable stores with adequate product-reception volume must be used. During handling local official regulations must be observed in order to avert contamination of water by the product.

**Section 8 – Exposure Controls/Personal Protection**

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
1-Methyl-2-pyrrolidone	872-50-4	WES-STEL	75 ppm 309 mg/m3	NZ OEL
Further information: Skin absorption				
		WES-TWA	25 ppm 103 mg/m3	NZ OEL
Further information: Skin absorption				
2,6-Di-tert-butyl-p-cresol	128-37-0	WES-TWA	10 mg/m3	NZ OEL
		TWA (Inhalable fraction and vapor)	2 mg/m3	ACGIH

Components	CAS-No	Control parameters	Biological specimen	Sampling time	Permissible concentration	Basis
1-Methyl-2-pyrrolidone	872-50-4	5-HydroxyN-methyl-2-pyrrolidone	Urine	End of shift (As soon as possible after exposure ceases)	100 mg/l	ACGIH BEI



### Personal protective equipment

<b>Respiratory protection</b>	: Recommended respiratory protection: full mask with filter ABEK-ST (ABEK-P3)
<b>Hand protection Material</b>	: Hand protection: protective gloves for chemicals made of Baypren, nitrile rubber or PVC wear
<b>Remarks</b>	: Breakthrough time not tested; dispose of immediately after contamination. Advice: The gloves should not be reused
<b>Eye protection</b>	: Safety glasses
<b>Protective measures</b>	: No special safety precautions are required during handling of pharmaceuticals in their intended finished form (tablets or liquid formulations) by chemists, the hospital's medical staff or patients. For the intake of ready for use pharmaceuticals or the external use on the skin please read the label and the package leaflet. The personal protective equipment is applicable for the handling of bulk material without packaging and for incidents if an exposure by the active ingredient or hazardous components can be expected. Wear suitable protective equipment.

### Section 9 – Physical and Chemical Properties

<b>Appearance</b>	: liquid
<b>Colour</b>	: light yellow
<b>Flash point</b>	: > 93°C
<b>Density</b>	: 0.937 g/cm <sup>3</sup>
<b>Decomposition temperature</b>	: No data available
<b>Explosive properties</b>	: No statements available.
<b>Oxidizing properties</b>	: No statements available.
<b>Impact sensitivity</b>	: No data available

### Section 10 – Stability and Reactivity

<b>Chemical stability</b>	: No statements available.
<b>Possibility of hazardous reactions</b>	: No data available
<b>Conditions to Avoid</b>	: No data available.
<b>Incompatible materials</b>	: Oxidizing agents
<b>Hazardous decomposition products</b>	: Carbon monoxide (CO) Carbon dioxide (CO <sub>2</sub> )

### Section 11 – Toxicological Information

#### 11.1 Acute Toxicity

##### Product

Acute oral toxicity : Acute toxicity estimate (ATE):1.031 mg/kg  
Method: Calculation method

##### Components:

1-Methyl-2-pyrrolidone



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Acute oral toxicity : LD50 (Rat): 3.600 mg/kg. Assessment: The component/mixture is minimally toxic after single ingestion.

Acute dermal toxicity : LD50 (Rabbit): 8.000 mg/kg  
LD50 (Rat): > 5.000 mg/kg. Assessment: No adverse effect has been observed in acute toxicity tests

#### **Eprinomectin**

Acute oral toxicity : LD50 (Rat, female): 55 mg/kg

#### **2,6-Di-tert-butyl-p-cresol**

Acute oral toxicity : LD50 (Rat): > 5.000 mg/kg. Method: OECD 401. Assessment: No adverse effect has been observed in acute toxicity tests.

Acute dermal toxicity : LD50 (Rat): > 5.000 mg/kg Method: OECD 402

### **11.2 Skin corrosion/Irritation**

#### **Components**

**1-Methyl-2-pyrrolidone** : Species: Rabbit  
Assessment: Causes skin irritation.  
Result: Skin irritation

**2,6-Di-tert-butyl-p-cresol** : Result: Mild skin irritation

### **11.3 Serious eye damage/eye irritation**

#### **Components**

**1-Methyl-2-pyrrolidone** : Species: Rabbit Result: Irritating to eyes.  
Assessment: Causes serious eye irritation.

### **11.4 Respiratory or skin sensitization**

#### **Components**

**1-Methyl-2-pyrrolidone** : Test Type: Skin sensitisation  
Remarks: Did not cause sensitisation on laboratory animals

**2,6-Di-tert-butyl-p-cresol** : Test Type: Skin sensitisation  
Species: Human experience  
Result: Does not cause skin sensitisation.

### **11.5 Chronic toxicity**

#### **11.5.1 Germ cell mutagenicity**

#### **Components**

**1-Methyl-2-pyrrolidone**  
Genotoxicity in vitro : Test Type: Bacterial mutagenicity  
Result: No indication of mutagenic effects

Genotoxicity in vivo : Remarks: In vivo tests did not show mutagenic effects

#### **2,6-Di-tert-butyl-p-cresol**

Genotoxicity in vitro : Test Type: Ames test  
Test system: Bacteria



Genotoxicity in vivo  
Result: negative  
: Test Type: Micronucleus test  
Cell type: mammalian cells  
Result: negative  
Test Type: In vivo cytogenetic Test  
Cell type: mammalian cells  
Result: negative

#### 11.5.2 Reproductive toxicity

##### Components

##### 1-Methyl-2-pyrrolidone

Reproductive toxicity - Assessment : Clear evidence of adverse effects on development, based on animal experiments.

##### Eprinomectin

Reproductive toxicity - Assessment : Some evidence of adverse effects on development, based on animal experiments., Some evidence of adverse effects on sexual function and fertility, based on animal experiments. Effects on or via lactation

#### 11.6 STOT - single exposure

##### Components

##### 1-Methyl-2-pyrrolidone

: Assessment: May cause respiratory irritation.

#### 11.7 STOT - repeated exposure

##### Components

##### Eprinomectin

: Assessment: May cause damage to the blood system through prolonged or repeated exposure.

#### 11.8 Repeated dose toxicity

##### Components

##### 2,6-Di-tert-butyl-p-cresol

: Species: Rat NOAEL: 25 mg/kg  
Application Route: Oral Exposure  
Time: 28-day

##### Further information

##### Components

##### 1-Methyl-2-pyrrolidone

: Remarks: Dermal absorption possible

### Section 12 - Ecological Information

#### 12.1 Ecotoxicity

##### Components:

##### 1-Methyl-2-pyrrolidone

Toxicity to fish : LC50 [Leuciscus idus (Golden orfe)]: > 500 mg/l  
Exposure time: 96 h  
Test Type: Acute Fish toxicity

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Toxicity to daphnia and other aquatic invertebrates : LC50 (Daphnia magna [Water flea]):  
>1.000 mg/l Exposure time: 24 h

Toxicity to algae : EC50 (Desmodesmus subspicatus [green algae]): > 500 mg/l Exposure time: 72 h

Toxicity to microorganisms : EC20: > 600 mg/l  
Exposure time: 0.5 h  
Method: OECD 209

#### **Ecotoxicology Assessment**

Acute aquatic toxicity : slightly water endangering

#### **Eprinomectin**

Toxicity to daphnia and other aquatic Invertebrates : EC50 [Daphnia (water flea)]:  
0,00045 mg/l Exposure time: 48 h

M-Factor (Acute aquatic toxicity) : 1.000

#### **Ecotoxicology Assessment**

Acute aquatic toxicity : Very toxic to aquatic life.

Chronic aquatic toxicity : Very toxic to aquatic life with long lasting effects.

#### **2,6-Di-tert-butyl-p-cresol**

Toxicity to fish : LC0 [Danio rerio (zebra fish)]: > 0,57 mg/l  
Exposure time: 96 h

Toxicity to daphnia and other aquatic Invertebrates : EC50 [Daphnia magna (Water flea)]:  
0,61 mg/l Exposure time: 48 h  
Method: OECD 202

Toxicity to algae : IC50 (Desmodesmus subspicatus [green algae]): > 0,4 mg/l Exposure time: 72 h  
Method: OECD 209

M-Factor (Acute aquatic toxicity) : 1

Toxicity to daphnia and other aquatic Invertebrates (Chronic toxicity) : NOEC [Daphnia magna (Water flea)]:  
0,316 mg/l Exposure time: 21 d  
Test Type: Immobilization  
Method: OECD 202

#### **Ecotoxicology Assessment**

Acute aquatic toxicity : Very toxic to aquatic life.

Chronic aquatic toxicity : Very toxic to aquatic life with long lasting effects.

#### **Persistence and degradability**

##### **Components:**

##### **1-Methyl-2-pyrrolidone:**

Biodegradability : Result: Readily biodegradable.  
Biodegradation: > 90 %  
Method: OECD 301E

Biochemical Oxygen Demand (BOD) : 2 mg/g  
Incubation time: 5 d

Chemical Oxygen Demand (COD) : 1.600 mg/l

ThOD : 1.939 mg/g



**Eprinomectin:**

Biodegradability : Result: Not rapidly biodegradable

**2,6-Di-tert-butyl-p-cresol:**

Biodegradability : Result: Not readily biodegradable.  
Biodegradation: 4,5 %  
Exposure time: 28 d  
Method: OECD 301 C  
Biodegradation: 30 %  
Exposure time: 14 d  
Method: OECD 302C

**12.2 Bioaccumulative potential**

**Components**

**1-Methyl-2-pyrrolidone**

Partition coefficient noctanol/water : log Pow: -0.46

**Eprinomectin**

Bioaccumulation : Remarks: The product may be accumulated in organisms.

**2,6-Di-tert-butyl-p-cresol**

Bioaccumulation : Bioaccumulative potential  
Partition coefficient noctanol/water : log Pow: 5,1

**12.3 Mobility in soil**

No data available

**12.4 Other adverse effects**

**Product:**

Additional ecological information : Do not allow to enter surface waters or groundwater

**Components**

**2,6-Di-tert-butyl-p-creso**

Adsorbed organic bound halogens (AOX) : Remarks: Product does not contain any organic halogens.  
Additional ecological information : Do not allow to enter surface waters or ground water.

**Section 13 – Disposal Considerations**

**Disposal methods**

Waste from residues : Dispose of as hazardous waste in compliance with local and national regulations.  
Contaminated packaging : Contaminated, empty containers are to be treated in the same way as the contents.

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### Section 14 – Transport Information

#### International Regulations

##### IATA-DGR

UN/ID No. : UN 3082  
Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE,  
LIQUID, N.O.S. (EPRINOMECTIN)  
Class : 9  
Packing group : III  
Labels : 9  
Packing instruction (cargo aircraft) : 964  
Packing instruction (passenger  
aircraft) : 964  
Environmentally hazardous : yes

##### IMDG-Code

UN number : UN 3082  
Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE,  
LIQUID, N.O.S. (EPRINOMECTIN)  
Class : 9  
Packing group : III  
Labels : 9  
EmS Code : F-A, S-F  
Marine pollutant : Yes

**Transport in bulk according to  
Annex II of MARPOL 73/78 and  
the IBC code** : Not applicable for product as supplied

### Section 15 – Regulatory Information

**Safety, health and environmental  
regulations/legislation specific  
for the substance or mixture** : No statements available.

**HSNO Approval Number** : HSR100069  
**HSNO Controls** : Approved handler certificate required.  
HSNO tracking required.  
Refer to EPA user guide for the HSNO control  
regulations for further information.

**The components of this product are reported in the following inventories:**

NZIoC : On the inventory, or in compliance with the inventory

### Section 16 – Other Information

Full text of other abbreviations AICS - Australian Inventory of Chemical Substances; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; CPR - Controlled Products Regulations; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated

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with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - SelfAccelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System Date format : dd.mm.yyyy ACGIH : USA. ACGIH Threshold Limit Values (TLV) ACGIH BEI : ACGIH - Biological Exposure Indices (BEI) NZ OEL : New Zealand. Workplace Exposure Standards for Atmospheric Contaminants ACGIH / TWA : 8-hour, time-weighted average NZ OEL / WES-TWA : Workplace Exposure Standard - Time Weighted average NZ OEL / WES-STEL : Workplace Exposure Standard - Short-Term Exposure Limit The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. NZ / EN

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