

## Section 1 - Identification of Chemical Product and Company

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**Chemical nature:** Flunixin is a non-steroidal anti-inflammatory drug (NSAID).

**Trade Name:** **Flunixin Injection**

**Product Use:** Analgesic/ anti-inflammatory. FOR ANIMAL TREATMENT ONLY.

**Creation Date:** **July, 2016**

**This version issued:** **August, 2016** and is valid for 5 years from this date.

**Poisons Information Centre: Phone 0800 764 766 from anywhere in New Zealand**

## Section 2 - Hazards Identification

### Statement of Hazardous Nature

This product is classified as: Not classified as hazardous according to the criteria of SWA.  
Not a Dangerous Good according to Australian Dangerous Goods (ADG) Code, IATA or IMDG/IMSBC criteria.

**SUSMP Classification:** None allocated.

**ADG Classification:** None allocated. Not a Dangerous Good according to Australian Dangerous Goods (ADG) Code, IATA or IMDG/IMSBC criteria.

**UN Number:** None allocated

**ERMA Number:** HSR002058

**Haz Classes:** 6.1D (oral, Inhal), 6.9B, 9.3C

**Group Standard:** None established.

**GHS Signal word: NONE. Not hazardous.**

#### PREVENTION

- P102: Keep out of reach of children.
- P262: Do not get in eyes, on skin, or on clothing.
- P281: Use personal protective equipment as required.

#### RESPONSE

- P353: Rinse skin or shower with water.
- P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
- P370+P378: Not combustible. Use extinguishing media suited to burning materials.

#### STORAGE

- P404: Store in a closed container.
- P411: Store at temperatures not exceeding 25°C.

#### DISPOSAL

P501: Dispose of small quantities and empty containers by wrapping with paper and putting in garbage. For larger quantities, if recycling or reclaiming is not possible, use a commercial waste disposal service.

**HSNO Classification:** 6.1D: Substances that are acutely toxic – Harmful.

- 6.9B: Substances that are harmful to human target organs or systems.
- 9.3C: Substances that are harmful to terrestrial vertebrates.

## Emergency Overview

**Physical Description & Colour:** Aqueous solution. No further details.

**Odour:** No data re odour.

**Major Health Hazards:** no significant risk factors have been found for this product.

## Section 3 - Composition/Information on Ingredients

Ingredients	CAS No	Conc, %	TWA (mg/m <sup>3</sup> )	STEL (mg/m <sup>3</sup> )
Flunixin meglumine	42461-84-7	50g/L	not set	not set
Other non hazardous ingredients	secret	to 100	not set	not set

## SAFETY DATA SHEET

This is a commercial product whose exact ratio of components may vary slightly. Minor quantities of other non hazardous ingredients are also possible.

The SWA TWA exposure value is the average airborne concentration of a particular substance when calculated over a normal 8 hour working day for a 5 day working week. The STEL (Short Term Exposure Limit) is an exposure value that may be equalled (but should not be exceeded) for no longer than 15 minutes and should not be repeated more than 4 times per day. There should be at least 60 minutes between successive exposures at the STEL. The term "peak" is used when the TWA limit, because of the rapid action of the substance, should never be exceeded, even briefly.

## Section 4 - First Aid Measures

### General Information:

You should call The Poisons Information Centre if you feel that you may have been poisoned, burned or irritated by this product. The number is 13 1126 from anywhere in Australia (0800 764 766 in New Zealand) and is available at all times. Have this SDS with you when you call.

**Inhalation:** First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.

**Skin Contact:** Irritation is unlikely. However, if irritation does occur, flush with lukewarm, gently flowing water for 5 minutes or until chemical is removed.

**Eye Contact:** No effects expected. If irritation does occur, flush contaminated eye(s) with lukewarm, gently flowing water for 5 minutes or until the product is removed. Obtain medical advice if irritation becomes painful or lasts more than a few minutes. Take special care if exposed person is wearing contact lenses.

**Ingestion:** If product is swallowed or gets in mouth, do NOT induce vomiting; wash mouth with water and give some water to drink. If symptoms develop, or if in doubt contact a Poisons Information Centre or a doctor.

## Section 5 - Fire Fighting Measures

**Fire and Explosion Hazards:** The major hazard in fires is usually inhalation of heated and toxic or oxygen deficient (or both), fire gases. There is no risk of an explosion from this product under normal circumstances if it is involved in a fire.

Only small quantities of decomposition products are expected from this product at temperatures normally achieved in a fire. This will only occur after heating to dryness.

Fire decomposition products from this product are likely to be irritating if inhaled.

**Extinguishing Media:** Not combustible. Use extinguishing media suited to burning materials.

**Fire Fighting:** If a significant quantity of this product is involved in a fire, call the fire brigade.

**Flash point:** Does not burn.

**Upper Flammability Limit:** Does not burn.

**Lower Flammability Limit:** Does not burn.

**Autoignition temperature:** Does not burn.

**Flammability Class:** Does not burn.

## Section 6 - Accidental Release Measures

**Accidental release:** This product is sold in small packages, and the accidental release from one of these is not usually a cause for concern. For minor spills, clean up, rinsing to sewer and put empty container in garbage. Although no special protective clothing is normally necessary because of occasional minor contact with this product, it is good practice to wear impermeable gloves when handling chemical products. In the event of a major spill, prevent spillage from entering drains or water courses and call emergency services.

## Section 7 - Handling and Storage

**Handling:** Keep exposure to this product to a minimum, and minimise the quantities kept in work areas. Check Section 8 of this SDS for details of personal protective measures, and make sure that those measures are followed. The measures detailed below under "Storage" should be followed during handling in order to minimise risks to persons using the product in the workplace. Also, avoid contact or contamination of product with incompatible materials listed in Section 10.

**Storage:** Store packages of this product in a cool place. Keep containers dry and away from water. Make sure that the product does not come into contact with substances listed under "Incompatibilities" in Section 10. Some liquid preparations settle or separate on standing and may require stirring before use. Check packaging - there may be further storage instructions on the label.

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## Section 8 - Exposure Controls and Personal Protection

The following Australian Standards will provide general advice regarding safety clothing and equipment:

Respiratory equipment: **AS/NZS 1715**, Protective Gloves: **AS 2161**, Occupational Protective Clothing: AS/NZS 4501 set 2008, Industrial Eye Protection: **AS1336** and **AS/NZS 1337**, Occupational Protective Footwear: **AS/NZS2210**.

**SWA Exposure Limits**                      **TWA (mg/m<sup>3</sup>)**                                      **STEL (mg/m<sup>3</sup>)**

Exposure limits have not been established by SWA for any of the significant ingredients in this product.

The ADI for Flunixin meglumine is set at 0.006mg/kg/day. The corresponding NOEL is set at 0.6mg/kg/day. ADI means Acceptable Daily Intake; NOEL means No-observable-effect-level. Data from Australian ADI List, June 2014.

No special equipment is usually needed when occasionally handling small quantities. The following instructions are for bulk handling or where regular exposure in an occupational setting occurs without proper containment systems.

**Ventilation:** No special ventilation requirements are normally necessary for this product. However make sure that the work environment remains clean and that vapours and mists are minimised.

**Eye Protection:** Eye protection such as protective glasses or goggles is recommended when this product is being used.

**Skin Protection:** The information at hand indicates that this product is not harmful and that normally no special skin protection is necessary. However, we suggest that you routinely avoid contact with all chemical products and that you wear suitable gloves (preferably elbow-length) when skin contact is likely.

**Protective Material Types:** We suggest that protective clothing be made from the following materials: rubber.

**Respirator:** Usually, no respirator is necessary when using this product. However, if you have any doubts consult the Australian Standard mentioned above.

## Section 9 - Physical and Chemical Properties:

<b>Physical Description &amp; colour:</b>	Aqueous solution. No further details.
<b>Odour:</b>	No data re odour.
<b>Boiling Point:</b>	Approximately 100°C at 100kPa.
<b>Freezing/Melting Point:</b>	Approximately 0°C.
<b>Volatiles:</b>	Water component.
<b>Vapour Pressure:</b>	2.37 kPa at 20°C (water vapour pressure).
<b>Vapour Density:</b>	As for water.
<b>Specific Gravity:</b>	1.04
<b>Water Solubility:</b>	Completely soluble in water.
<b>pH:</b>	8.0-9.0
<b>Volatility:</b>	No data.
<b>Odour Threshold:</b>	No data.
<b>Evaporation Rate:</b>	As for water.
<b>Coeff Oil/water Distribution:</b>	No data
<b>Autoignition temp:</b>	Does not burn.

## Section 10 - Stability and Reactivity

**Reactivity:** This product is unlikely to react or decompose under normal storage conditions. However, if you have any doubts, contact the supplier for advice on shelf life properties.

**Conditions to Avoid:** This product should be kept in a cool place, preferably below 30°C. Containers should be kept dry.

**Incompatibilities:** No particular Incompatibilities.

**Fire Decomposition:** Only small quantities of decomposition products are expected from this product at temperatures normally achieved in a fire. This will only occur after heating to dryness. Combustion forms carbon dioxide, and if incomplete, carbon monoxide and possibly smoke. Water is also formed. May form nitrogen and its compounds, and under some circumstances, oxides of nitrogen. Occasionally hydrogen cyanide gas in reducing atmospheres. May form hydrogen fluoride gas and other compounds of fluorine. Carbon monoxide poisoning produces headache, weakness, nausea, dizziness, confusion, dimness of vision, disturbance of judgment, and unconsciousness followed by coma and death.

**Polymerisation:** This product will not undergo polymerisation reactions.

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## Section 11 - Toxicological Information

### Local Effects:

**Target Organs:** There is no data to hand indicating any particular target organs.

## Classification of Hazardous Ingredients

### Ingredient

### Risk Phrases

No ingredient mentioned in the HSIS Database is present in this product at hazardous concentrations.

## Potential Health Effects

### Flunixin maglumine

In an acute inhalation toxicity study in the rat, all animals died at an exposure concentration of 0.52 mg/l for 4 hours. A one year, GLP compliant repeated dose oral toxicity study was performed in rats at dose levels equivalent to 0, 1,2 and 6mg flunixin free acid/kg bw day.

Group sizes consisted of 60 animals (30 males and 30 females) per dose level.

Mortality rates of 33% for males and 20% for females were recorded at the highest dose level. Deaths were primarily associated with gastrointestinal ulceration and peritonitis. Statistically significant changes were reported in food intake, body weight, body weight gain and various clinical pathology parameters at the highest dose level. Statistically significant increases in the incidence of faecal occult blood and splenic weights were evident at doses higher than or equal to 2 mg/kg bw/day. Post mortem changes reported at doses higher than or equal to 2 mg/kg bw/day included gastro-intestinal tract ulceration, peritonitis, lymphadenopathy, pallor of the body and papillary necrosis of the kidneys. A NOEL of 1 mg/kg bw was retained.

### Carcinogen Status:

**SWA:** No significant ingredient is classified as carcinogenic by SWA.

**NTP:** No significant ingredient is classified as carcinogenic by NTP.

**IARC:** No significant ingredient is classified as carcinogenic by IARC.

## Section 12 - Ecological Information

### 9.3C Harmful to terrestrial vertebrates.

### Flunixin maglumine

The acute LD<sub>50</sub> of flunixin meglumine in the mouse was greater than or equal to 170, 306, and 111 mg/kg bw by the oral, intramuscular and intravenous routes; for rats the corresponding values were greater than or equal to 113, 180 and greater than or equal to 90 mg/kg bw.

## Section 13 - Disposal Considerations

**Disposal:** Harmful to terrestrial vertebrates. Avoid release to the environment.

Preferably dispose of product by use. Otherwise dispose of product, packaging and waste at an approved landfill or equivalent facility.

## Section 14 - Transport Information

**UN Number:** This product is not classified as a Dangerous Good by ADG, IATA or IMDG/IMSBC criteria. No special transport conditions are necessary unless required by other regulations.

## Section 15 - Regulatory Information

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

**ERMA Number:** HSR002058

**Group Standard:** None established.

- 6.1D: Substances that are acutely toxic – Harmful.
- 6.9B: Substances that are harmful to human target organs or systems.
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## Section 16 - Other Information

**This SDS contains only safety-related information. For other data see product literature.**

### Acronyms:

**CAS number** Chemical Abstracts Service Registry Number

## SAFETY DATA SHEET

<b>Hazchem Code</b>	Emergency action code of numbers and letters that provide information to emergency services especially firefighters
<b>IARC</b>	International Agency for Research on Cancer
<b>NOS</b>	Not otherwise specified
<b>NTP</b>	National Toxicology Program (USA)
<b>R-Phrase</b>	Risk Phrase
<b>UN Number</b>	United Nations Number

THIS SDS SUMMARISES OUR BEST KNOWLEDGE OF THE HEALTH AND SAFETY HAZARD INFORMATION OF THE PRODUCT AND HOW TO SAFELY HANDLE AND USE THE PRODUCT IN THE WORKPLACE. EACH USER MUST REVIEW THIS SDS IN THE CONTEXT OF HOW THE PRODUCT WILL BE HANDLED AND USED IN THE WORKPLACE.

IF CLARIFICATION OR FURTHER INFORMATION IS NEEDED TO ENSURE THAT AN APPROPRIATE RISK ASSESSMENT CAN BE MADE, THE USER SHOULD CONTACT THIS COMPANY SO WE CAN ATTEMPT TO OBTAIN ADDITIONAL INFORMATION FROM OUR SUPPLIERS. OUR RESPONSIBILITY FOR PRODUCTS SOLD IS SUBJECT TO OUR STANDARD TERMS AND CONDITIONS, A COPY OF WHICH IS SENT TO OUR CUSTOMERS AND IS ALSO AVAILABLE ON REQUEST.

Please read all labels carefully before using product.

Date of preparation: August, 2016.

**SAFETY DATA SHEET**