

## Section 1 - Identification of The Material and Supplier

**FARMALINX Pty Ltd**  
**Level 25, Suite 2506 (Tower 2)**  
**101 Grafton Street**  
**Bondi Junction, NSW 2022**

**Phone: 02 9389 2455**  
**Fax: 02 9389 2844**  
**www.farmalinx.com**

**Chemical nature:** Imazethapyr is an imidazolinone derivative.  
**Trade Name:** **Farmalinx Belta 700 WG Herbicide**  
**APVMA Code:** 67670  
**Product Use:** Agricultural herbicide for use as described on the product label.  
**Creation Date:** **August, 2012**  
**This version issued:** **July, 2020** and is valid for 5 years from this date.

## Section 2 - Hazards Identification

### Statement of Hazardous Nature

This product is classified as: Xi, Irritating. Hazardous according to the criteria of SWA.

Not subject to the ADG Code when transported in Australia by Road or Rail in packages 500kg(L) or less; or IBCs (refer to SP AU01). However if transported by Air or Sea, this provision does not apply. Then the product is classed as Dangerous (Class 9 Environmentally Hazardous) by IATA and IMDG respectively. See details below and in Section 14 of this MSDS.

**Risk Phrases:** R36/38, R50/53. Irritating to eyes and skin. Very toxic to aquatic organisms, may cause long-term adverse effects to the aquatic environment.

**Safety Phrases:** S22, S24/25, S36/37. Do not breathe dust. Avoid contact with skin and eyes. Wear suitable protective clothing and gloves.

**SUSMP Classification:** S5

**ADG Classification:** Class 9: Miscellaneous dangerous goods.

**UN Number:** 3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.



### GHS Signal word: WARNING

#### HAZARD STATEMENT:

- H315: Causes skin irritation.
- H320: Causes eye irritation.
- H335: May cause respiratory irritation.
- H410: Very toxic to aquatic life with long lasting effects.

#### PREVENTION

- P264: Wash contacted areas thoroughly after handling.
- P281: Use personal protective equipment as required.

#### RESPONSE

- P335: Brush off loose particles from skin.
- P362: Take off contaminated clothing and wash before reuse.
- P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
- P302+P352: IF ON SKIN: Wash with plenty of soap and water.
- P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P332+P313: If skin irritation occurs: Get medical advice.
- P337+P313: If eye irritation persists: Get medical advice.
- P370+P378: In case of fire, use carbon dioxide, dry chemical, foam, water fog. Water fog or fine spray is the preferred medium for large fires.

#### STORAGE

- P402+P404: Store in a dry place. Store in a closed container.
- P403+P235: Store in a well-ventilated place. Keep cool.

## SAFETY DATA SHEET

**DISPOSAL**

P501: Dispose of contents and containers as specified on the registered label.

### Emergency Overview

**Physical Description & Colour:** Off white granulated solid.

**Odour:** No odour.

**Major Health Hazards:** Technical: The acute oral LD<sub>50</sub> for technical Imazethapyr was reported to be >5000 mg/kg for rats. The acute inhalation LC<sub>50</sub> for rats exposed to Imazethapyr is 3.27 mg/L. The dermal LD<sub>50</sub> for rabbits exposed to technical Imazethapyr was >2000 mg/kg. It was found to be slightly irritating to the rabbit eye, with complete recovery in 7 days. The technical material was found to be slightly irritating to the skin of male rabbits. Irritating to eyes and skin.

### Potential Health Effects

**Inhalation:**

**Short Term Exposure:** Available data indicates that this product is not harmful. However product may be mildly irritating, although unlikely to cause anything more than mild transient discomfort.

**Long Term Exposure:** No data for health effects associated with long term inhalation.

**Skin Contact:**

**Short Term Exposure:** Available data indicates that this product is not harmful. It should present no hazards in normal use. However product is a skin irritant. Symptoms may include itchiness and reddening of contacted skin. Other symptoms may also become evident, but all should disappear once exposure has ceased.

**Long Term Exposure:** No data for health effects associated with long term skin exposure.

**Eye Contact:**

**Short Term Exposure:** This product is an eye irritant. Symptoms may include stinging and reddening of eyes and watering which may become copious. Other symptoms may also become evident. If exposure is brief, symptoms should disappear once exposure has ceased. However, lengthy exposure or delayed treatment may cause permanent damage.

**Long Term Exposure:** No data for health effects associated with long term eye exposure.

**Ingestion:**

**Short Term Exposure:** Significant oral exposure is considered to be unlikely. However, this product is an oral irritant. Symptoms may include burning sensation and reddening of skin in mouth and throat. Other symptoms may also become evident, but all should disappear once exposure has ceased.

**Long Term Exposure:** No data for health effects associated with long term ingestion.

**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 3 - Composition/Information on Ingredients

Ingredients	CAS No	Conc,%	TWA (mg/m <sup>3</sup> )	STEL (mg/m <sup>3</sup> )
Imazethapyr	81335-77-5	700g/kg	not set	not set
Other non hazardous ingredients	secret	to 100	not set	not set

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:** No first aid measures normally required. However, if inhalation has occurred, and irritation has developed, remove to fresh air and observe until recovered. If irritation becomes painful or persists more than about 30 minutes, seek medical advice.

### SAFETY DATA SHEET

**Skin Contact:** Quickly and gently brush away excess particles. Wash gently and thoroughly with warm water (use non-abrasive soap if necessary) for 10-20 minutes or until product is removed. Under running water, remove contaminated clothing, shoes and leather goods (e.g. watchbands and belts) and completely decontaminate them before reuse or discard. If irritation persists, repeat flushing and seek medical attention.

**Eye Contact:** Quickly and gently brush particles from eyes. Immediately flush the contaminated eye(s) with lukewarm, gently flowing water for 20 minutes or until the product is removed, while holding the eyelid(s) open. Take care not to rinse contaminated water into the unaffected eye or onto the face. Obtain medical attention immediately. Take special care if exposed person is wearing contact lenses.

**Ingestion:** If swallowed, do NOT induce vomiting. Wash mouth with water and contact a Poisons Information Centre, or call 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 little risk of an explosion from this product if commercial quantities are involved in a fire. This product, if scattered, may form flammable or explosive dust clouds in air.

Fire decomposition products from this product may be toxic if inhaled. Take appropriate protective measures.

**Extinguishing Media:** Water fog or fine spray is the preferred medium for large fires. Try to contain spills, minimise spillage entering drains or water courses.

**Fire Fighting:** If a significant quantity of this product is involved in a fire, call the fire brigade. There is little danger of a violent reaction or explosion if significant quantities of this product are involved in a fire. Recommended personal protective equipment is full fire kit and breathing apparatus.

**Flash point:** No data

**Upper Flammability Limit:** No data.

**Lower Flammability Limit:** No data.

**Autoignition temperature:** No data.

**Flammability Class:** No data.

## Section 6 - Accidental Release Measures

**Accidental release:** In the event of a major spill, prevent spillage from entering drains or water courses. Wear full protective clothing including eye/face protection. All skin areas should be covered. See below under Personal Protection regarding Australian Standards relating to personal protective equipment. Suitable materials for protective clothing include rubber, PVC. Eye/face protective equipment should comprise as a minimum, protective goggles. If there is a significant chance that dusts are likely to build up in cleanup area, we recommend that you use a suitable Dust Mask. Use a P1 mask, designed for use against mechanically generated particles e.g. silica & asbestos. Otherwise, not normally necessary.

Stop leak if safe to do so, and contain spill. Because of the environmentally hazardous nature of this product, special care should be taken to restrict release to waterways or drains. Sweep up and shovel or collect recoverable product into labelled containers for recycling or salvage, and dispose of promptly. Consider vacuuming if appropriate. Recycle containers wherever possible after careful cleaning. Refer to product label for specific instructions. After spills, wash area preventing runoff from entering drains. If a significant quantity of material enters drains, advise emergency services. Full details regarding disposal of used containers, spillage and unused material may be found on the label. If there is any conflict between this SDS and the label, instructions on the label prevail. Ensure legality of disposal by consulting regulations prior to disposal. Thoroughly launder protective clothing before storage or re-use. Advise laundry of nature of contamination when sending contaminated clothing to laundry.

## 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:** This product is a Scheduled Poison. Observe all relevant regulations regarding sale, transport and storage of this schedule of poison. Check packaging - there may be further storage instructions on the label.

## 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>)**

### SAFETY DATA SHEET

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

The ADI for Imazethapyr is set at 2.8mg/kg/day. The corresponding NOEL is set at 276mg/kg/day. ADI means Acceptable Daily Intake; NOEL means No-observable-effect-level. Data from Australian ADI List, Sept 2011.

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:** This product should only be used in a well ventilated area. If natural ventilation is inadequate, use of a fan is suggested.

**Eye Protection:** Protective glasses or goggles should be worn when this product is being used. Failure to protect your eyes may cause them harm. Emergency eye wash facilities are also recommended in an area close to where this product is being used.

**Skin Protection:** Prevent skin contact by wearing impervious gloves, clothes and, preferably, apron. Make sure that all skin areas are covered. See below for suitable material types.

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

**Respirator:** If there is a significant chance that dusts are likely to build up in the area where this product is being used, we recommend that you use a suitable Dust Mask. Otherwise, not normally necessary.

Eyebaths or eyewash stations and safety deluge showers should be provided near to where this product is being handled commercially.

## Section 9 - Physical and Chemical Properties:

<b>Physical Description &amp; colour:</b>	Off white granulated solid.
<b>Odour:</b>	No odour.
<b>Boiling Point:</b>	Not available.
<b>Freezing/Melting Point:</b>	No specific data. Solid at normal temperatures.
<b>Volatiles:</b>	No data.
<b>Vapour Pressure:</b>	No data.
<b>Vapour Density:</b>	Not applicable.
<b>Specific Gravity:</b>	No data.
<b>Water Solubility:</b>	Dispersible.
<b>pH:</b>	3.0-5.0
<b>Volatility:</b>	No data.
<b>Odour Threshold:</b>	No data.
<b>Evaporation Rate:</b>	Not applicable.
<b>Coeff Oil/water Distribution:</b>	No data
<b>Viscosity:</b>	Not applicable.
<b>Autoignition temp:</b>	No data.

## 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:** Protect this product from light. Store in the closed original container in a dry, cool, well-ventilated area out of direct sunlight.

**Incompatibilities:** strong acids, strong bases, strong oxidising agents.

**Fire Decomposition:** 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. 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.

## Section 11 - Toxicological Information

**Toxicity:** Technical: The acute oral LD<sub>50</sub> for technical Imazethapyr was reported to be >5000 mg/kg for rats. The acute inhalation LC<sub>50</sub> for rats exposed to Imazethapyr is 3.27 mg/L. The dermal LD<sub>50</sub> for rabbits exposed to technical Imazethapyr was >2000 mg/kg. It was found to be slightly irritating to the rabbit eye, with complete recovery in 7 days. The technical material was found to be slightly irritating to the skin of male rabbits.

Formulated product: The oral LD<sub>50</sub> of a 250g/L liquid formulation of Imazethapyr was also >5000 mg/kg for the rat and rabbit. The LC<sub>50</sub> was >2.67 mg/L. The dermal LD<sub>50</sub> was >5000 mg/kg. The liquid formulation was non-irritating to the rabbit eye and skin.

## SAFETY DATA SHEET

This revision issued: July, 2020

The oral LD<sub>50</sub> of a 70% granular formulation was >5000 mg/kg for the rat and >2000 mg/kg for the rabbit. It resulted in moderate irritation to the rabbit eye, with complete recovery in 14 days. It showed slight skin irritation to the rabbit with complete recovery in 72 hours.

**Chronic Toxicity:** 90-day dietary subchronic toxicity studies in rats and dogs had a No Observable Effect Level (NOEL) of 10,000 ppm, the highest dose tested. A 1-year feeding study in dogs fed diets containing of 0, 1,000, 5,000, or 10,000 ppm reported a NOEL of 1,000 ppm (25 mg/kg/day).

It appears that Imazethapyr has no reproductive effects, or teratogenic, mutagenic or carcinogenic properties.

**Organ Toxicity:** No information was found.

**Fate in Humans and Animals:** No information was found.

There is no data to hand indicating any particular target organs.

### Classification of Hazardous Ingredients

Ingredient	Risk Phrases
Imazethapyr	Conc>=20%: Xi; R36/38

### Section 12 - Ecological Information

Insufficient data to be sure of status.

**Effects on Birds:** not harmful to birds studied either in acute or 8 day studies.

**Effects on Aquatic Organisms:** Does not appear to be harmful to either fish or Daphnia magna (water flea).

**Effects on Other Animals (Nontarget species):** The contact LD<sub>50</sub> for honey bees was >100µg/bee.

#### ENVIRONMENTAL FATE

**Breakdown of Chemical in Soil and Groundwater:** The formulated product does not leach through the soil. It is weakly to moderately adsorbed and is not lost from the soil through volatilization. Soil microorganisms do not appear to play a significant role in the degradation of the formulated product.

**Breakdown of Chemical in Surface Water:** No information was found.

**Breakdown of Chemical in Vegetation:** The formulated product is readily absorbed through the roots and foliage. It is translocated in both xylem and phloem tissues and accumulates in growing points.

### Section 13 - Disposal Considerations

**Disposal:** Special help is available for the disposal of Agricultural Chemicals. The product label will give general advice regarding disposal of small quantities, and how to cleanse containers. However, for help with the collection of unwanted rural chemicals, contact ChemClear 1800 008 182 <http://www.chemclear.com.au/> and for help with the disposal of empty drums, contact DrumMuster <http://www.drummuster.com.au/> where you will find contact details for your area.

### Section 14 - Transport Information

**Not subject to the ADG Code when transported in Australia by Road or Rail in packages 500kg(L) or less; or IBCs (refer to SP AU01) but classed as Dangerous by IATA and IMDG when carried by Air or Sea transport (see details below).**

**UN Number:** 3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.

**Hazchem Code:** 2Z

**Special Provisions:** 179, 274, AU01

**Limited quantities:** ADG 7 specifies a Limited Quantity value of 5 kg for this class of product.

**Dangerous Goods Class:** Class 9: Miscellaneous Dangerous Goods.

**Packaging Group:** III

**Packaging Method:** P002, IBC08, LP02

Class 9 Miscellaneous Dangerous Goods shall not be loaded in the same vehicle or packed in the same freight container with Dangerous Goods of Class 1 (Explosives).

### Section 15 - Regulatory Information

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

The following ingredient: Imazethapyr, is mentioned in the SUSMP.

### Section 16 - Other Information

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

#### Acronyms:

**ADG Code** Australian Code for the Transport of Dangerous Goods by Road and Rail (7<sup>th</sup> edition)

**AICS** Australian Inventory of Chemical Substances

#### SAFETY DATA SHEET

Issued by: Farmalinx Pty Ltd

Phone: 02 9389 2455 (office hours)

Poisons Information Centre: 13 1126 from anywhere in Australia, (0800 764 766 in New Zealand)

<b>SWA</b>	Safe Work Australia, formerly ASCC and NOHSC
<b>CAS number</b>	Chemical Abstracts Service Registry Number
<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>SUSMP</b>	Standard for the Uniform Scheduling of Medicines & Poisons
<b>UN Number</b>	United Nations Number

THIS SDS SUMMARISES OUR BEST KNOWLEDGE OF THE HEALTH AND SAFETY HAZARD STATEMENT: 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.

This SDS is prepared in accord with the SWA document "Preparation of Safety Data Sheets for Hazardous Chemicals - Code of Practice" (December 2011)

Copyright © Kilford & Kilford Pty Ltd, October, 2015.

<http://www.kilford.com.au/> Phone (02)9251 4532

## SAFETY DATA SHEET