

## Section 1 - Identification of the Material and Supplier

<b>Chemical nature:</b>	Water solution of herbicide ingredients.
<b>Trade Name:</b>	<b>Bin-Die Selective Lawn Weeder</b>
<b>Product Use:</b>	For the control of Bindii & other weeds in Buffalo & other lawns as indicated in How to Use table.
<b>Supplier:</b>	<b>Amgrow Pty Ltd</b> <b>3/29 Birnie Ave</b> <b>Lidcombe NSW 2141</b> <b>Phone: 02 9395 1200 (office hours) Fax: 02 4729 3037</b> <b>www.amgrow.com.au</b>
<b>This version issued:</b>	<b>October 2016</b> and is valid for 5 years from this date.
<b>Poisons Information Centre:</b>	<b>Phone 13 1126 from anywhere in Australia</b>

## Section 2 - Hazards Identification

### Statement of Hazardous Nature

This product is classified as: Xn, Harmful. Xi, Irritating. N, Dangerous to the environment. Hazardous according to the criteria of SWA.

Not a Dangerous Good according to Australian Dangerous Goods (ADG) Code, IATA or IMDG/IMSBC criteria.

**Risk Phrases:** R43, R51, R20/22, R36/38. May cause sensitisation by skin contact. Toxic to aquatic organisms. Harmful by inhalation and if swallowed. Irritating to eyes and skin.

**Safety Phrases:** S20, S23, S28, S38, S51, S61, S24/25, S37/39. When using, do not eat or drink. Do not breathe spray mists. After contact with skin, wash immediately with plenty of soap and water. In case of insufficient ventilation, wear suitable respiratory equipment. Use only in well ventilated areas. Avoid release to the environment. Refer to special instructions/Safety Data Sheets. Avoid contact with skin and eyes. Wear suitable gloves and eye/face protection.

**SUSMP Classification:** S6

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

**UN Number:** None allocated



### GHS Signal word: WARNING

#### HAZARD STATEMENT:

- H302: Harmful if swallowed.
- H315: Causes skin irritation.
- H317: May cause an allergic skin reaction.
- H320: Causes eye irritation.
- H332: Harmful if inhaled.
- H335: May cause respiratory irritation.
- H361: Suspected of damaging fertility or the unborn child.
- H401: Toxic to aquatic life.

#### PREVENTION

- P102: Keep out of reach of children.
- P261: Avoid breathing fumes, mists, vapours or spray.
- P262: Do not get in eyes, on skin, or on clothing.
- P264: Wash contacted areas thoroughly after handling.
- P270: Do not eat, drink or smoke when using this product.
- P271: Use only outdoors or in a well ventilated area.
- P272: Contaminated work clothing should not be allowed out of the workplace.
- P273: Avoid release to the environment.
- P280: Wear protective gloves, protective clothing and eye or face protection.

#### RESPONSE

### SAFETY DATA SHEET

P362: Take off contaminated clothing and wash before reuse.  
P301+P312: IF SWALLOWED: Call a POISON CENTRE or doctor if you feel unwell.  
P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  
P302+P352: IF ON SKIN: Wash with plenty of soap and water.  
P304+P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P333+P313: If skin irritation or rash occurs: Get medical advice.  
P337+P313: If eye irritation persists: Get medical advice.  
P370+P378: Not combustible. Use extinguishing media suited to burning materials.

**STORAGE**

P410: Protect from sunlight.  
P402+P404: Store in a dry place. Store in a closed container.  
P403+P235: Store in a well-ventilated place. Keep cool.

**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.

**Emergency Overview**

**Physical Description & Colour:** Clear light brown liquid.

**Odour:** Characteristic solvent odour.

**Major Health Hazards:** harmful by inhalation and if swallowed, irritating to eyes and skin, skin irritant, possible skin sensitiser.

**Section 3 - Composition/Information on Ingredients**

Ingredients	CAS No	Conc. %	TWA (mg/m <sup>3</sup> )	STEL (mg/m <sup>3</sup> )
Bromoxynil (as the octanoate)	1689-99-2	20	not set	not set
MCPA (as the 2-ethylhexyl ester)	29450-45-1	20	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:** If symptoms of poisoning become evident, contact a Poisons Information Centre, or call a doctor at once. Remove source of contamination or move victim to fresh air. If breathing is difficult, oxygen may be beneficial if administered by trained personnel, preferably on a doctor's advice. DO NOT allow victim to move about unnecessarily. Symptoms of pulmonary oedema can be delayed up to 48 hours after exposure.

**Skin Contact:** 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:** Immediately flush the contaminated eye(s) with lukewarm, gently flowing water for 15 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.

**SAFETY DATA SHEET**

## 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 not expected to be hazardous or harmful.

**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:** Not applicable - 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:** This product is a Scheduled Poison. Observe all relevant regulations regarding sale, transport and storage of this schedule of poison. Protect this product from light. Store in the closed original container in a dry, cool, well-ventilated area out of direct sunlight. 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.

## 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 Bromoxynil is set at 0.003mg/kg/day. The corresponding NOEL is set at 0.3mg/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:** 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:** If you believe you may have a sensitisation to this product or any of its declared ingredients, you should 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: PVC.

**Respirator:** Usually, no respirator is necessary when using this product. However, if you have any doubts consult the Australian Standard mentioned above. Otherwise, not normally necessary.

### SAFETY DATA SHEET

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

### Section 9 - Physical and Chemical Properties:

<b>Physical Description &amp; colour:</b>	Clear light brown liquid.
<b>Odour:</b>	Characteristic solvent odour.
<b>Boiling Point:</b>	Solvent boils in range 190-270°C
<b>Freezing/Melting Point:</b>	No specific data. Liquid at normal temperatures
<b>Volatiles:</b>	Water component.
<b>Vapour Pressure:</b>	No data
<b>Vapour Density:</b>	>1
<b>Specific Gravity:</b>	1.07 – 1.09
<b>Water Solubility:</b>	Emulsifiable in water.
<b>pH:</b>	No data
<b>Volatility:</b>	30-40%
<b>Odour Threshold:</b>	No data.
<b>Evaporation Rate:</b>	No Data
<b>Coeff Oil/water Distribution:</b>	No data
<b>Auto ignition temp:</b>	Not applicable - 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:** Protect this product from light. Store in the closed original container in a dry, cool, well-ventilated area out of direct sunlight.

**Incompatibilities:** acids, oxidising agents.

**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 hydrogen chloride gas, other compounds of chlorine. Bromine compounds. 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

#### Local Effects:

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

Bromoxynil is a SWA Class 3 Reproductive risk.

Bromoxynil is Classified by SWA as a potential sensitiser by skin contact.

#### Potential Health Effects

**Persons sensitised to Bromoxynil should avoid contact with this product.**

#### Inhalation:

**Short Term Exposure:** Available data shows that this product is harmful, but symptoms are not available. In addition 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:** Classified as a potential sensitiser by skin contact. Exposure to a skin sensitiser, once sensitisation has occurred, may manifest itself as skin rash or inflammation, and in some individuals this reaction can be severe. In addition 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:

## SAFETY DATA SHEET

**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. Available data shows that this product is harmful, but symptoms are not available. 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.

---

### **Classification of Hazardous Ingredients**

---

Ingredient	Risk Phrases
Bromoxynil	$\geq 1\% \text{Conc} < 3\%$ : Xi; R43
<b>Toxicological Data:</b>	
Bromoxynil: Oral LD <sub>50</sub> = 240-400 mg/kg (rat)	Dermal LD <sub>50</sub> > 2000 mg/kg (rabbit).
MCPA: Oral LD <sub>50</sub> = 700-1160 mg/kg (rat)	Dermal LD <sub>50</sub> > 4000 mg/kg (rabbit).

#### **Reproductive effects:**

- Data suggests that Bromoxynil does not cause reproductive effects.
- MCPA - It is unlikely that humans will experience effects under normal exposure conditions.

**Teratogenic effects:** Teratogenic effects in humans are unlikely at expected exposure levels.

#### **Mutagenic effects:**

- Bromoxynil - No data currently available.
- MCPA - It appears that the compound poses little or no mutagenic risk.

## **Section 12 - Ecological Information**

This product is toxic to aquatic organisms.

**Effects on other organisms:** Bromoxynil and MCPA are not toxic to bees.

Avoid contaminating waterways and fishponds. Do not allow spray to drift into aquatic environments, non target plants. Keep children, pets and wildlife off treated areas until spray has dried.

## **Section 13 - Disposal Considerations**

**Disposal:** 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.

## **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.

The following ingredients: Bromoxynil, MCPA, are mentioned in the SUSMP.

### **SAFETY DATA SHEET**



## Section 16 - Other Information

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

### Acronyms:

<b>ADG Code</b>	Australian Code for the Transport of Dangerous Goods by Road and Rail (7 <sup>th</sup> edition)
<b>AICS</b>	Australian Inventory of Chemical Substances
<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 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 © Amgrow Pty Ltd, October 2016.

## SAFETY DATA SHEET