

# SAFETY DATA SHEET

According to  
HSNO Hazardous Substances (Safety Data Sheets) Notice 2017

## Section 1. Identification of the material and the supplier

Product: **BeetPro**  
 Product Use: Herbicide  
 Restriction of Use: Refer to Section 15

New Zealand Supplier: **Adria Crop Protection Solutions**  
 Address: 407 State Highway 16  
 Kumeu 0841,  
 Auckland

Telephone: +64 9 412 9817  
 Fax: +64 9 412 9807  
 Website: www.adria.nz

**Emergency No: 0800 734 607 (24hr)3**  
**0800 764 766 (National Poison Centre)**

Date of SDS Preparation: 19 July 2018

## Section 2. Hazards Identification

This substance is hazardous according to the EPA Hazardous Substances (Classification) Notice 2017

**EPA Approval No: HSR101154**  
**Pictograms**



Toxic/Irritant    Chronic    Ecotoxic

Signal Word: **Warning**

| HSNO Classification | Hazard Code | Hazard Statement   | GHS Category    |
|---------------------|-------------|--|-----------------|
| 6.1D (inh)          | H332        | Harmful if inhaled.  | Acute Tox. 4    |
| 6.1E (oral)         | H303        | May be harmful if swallowed.                                       | Acute Tox. 5    |
| 6.1E (dermal)       | H313        | May be harmful in contact with skin.                               | Acute Tox. 5    |
| 6.4A                | H319        | Causes serious eye irritation.                                     | Eye Irrit. 2A   |
| 6.5B                | H317        | May cause an allergic skin reaction.                               | Skin Sens. 1    |
| 6.9B                | H373        | May cause damage to organs through prolonged or repeated exposure. | STOT RE 2       |
| 9.1A                | H400        | Very toxic to aquatic life.  | Aquatic Acute 1 |
| 9.2A                | H421        | Very toxic to the soil environment.                                | -               |
| 9.3C                | H433        | Harmful to terrestrial vertebrates.                                | -               |

| Prevention Code | Prevention Statement   |
|-----------------|--|
| P102            | Keep out of reach of children.   |
| P103            | Read label before use.   |
| P260            | Do not breathe fumes, vapours and spray.                               |
| P264            | Wash hands thoroughly after handling.                                  |
| 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 clothing as detailed in Section 8.                     |

| Response code    | Response Statement   |
|------------------|--|
| P101             | If medical advice is needed, have product container or label at hand.  |
| P312             | Call a POISON CENTER or doctor/physician if you feel unwell.   |
| P363             | Wash contaminated clothing before reuse.   |
| P391             | Collect spillage.  |
| P302 + P352      | IF ON SKIN: Wash with plenty of soap and water.  |
| P304 + P340      | IF INHALED: Remove 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/attention.   |
| P337 + P313      | If eye irritation persists: Get medical advice/attention.  |

| Storage Code   | Storage Statement |
|----------------|-------------------|
| None allocated |                   |

| Disposal Code | Disposal Statement   |
|---------------|----------------------|
| P501          | Refer to Section 13. |

### Section 3. Composition / Information on Hazardous Ingredients

| Ingredients  | Wt%  | CAS NUMBER. |
|--------------|------|-------------|
| Phenmedipham | 6.0  | 13684-63-4  |
| Desmedipham  | 6.0  | 13684-56-5  |
| Ethofumesate | 6.0  | 26225-79-6  |
| Metamitron   | 20.0 | 41394-05-2  |

### Section 4. First Aid Measures

Routes of Exposure:

|              |   |
|--------------|---|
| If in Eyes   | Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.  |
| If on Skin   | Wash with plenty of soap and water. Wash contaminated clothing before reuse. Wash affected areas with soap and water. If skin irritation or rash occurs: Get medical advice/attention.  |
| If Swallowed | Rinse mouth. Never give anything to an unconscious person. Seek medical attention immediately if required.  |
| If Inhaled   | Remove person to fresh air. Remove contaminated clothing and loosen remaining clothing. Allow person to assume most comfortable position and keep warm. Keep at rest until fully recovered. Apply artificial respiration if not breathing. Get medical advice if breathing becomes difficult. |

### Most important symptoms and effects, both acute and delayed

Product Name: BeetPro  
Date of SDS: 19 July 2018

Prepared by: Technical Compliance Consultants (NZ) Ltd  
Tel: 64 9 475 5240 www.techcomp.co.nz

Symptoms:  
**Ingestion:** May be harmful if swallowed.  
**Inhalation:** Harmful if inhaled.  
**Skin:** May be harmful if in contact with the skin. May cause an allergic skin reaction.  
**Eye:** Causes severe eye irritation.  
**Chronic:** May cause damage to organs through prolonged or repeated exposure.

**Treatment:** Treat symptomatically. In the event of a mouthful or more being ingested, the following measures should be considered: In case of ingestion, gastric lavage should be considered in cases of significant ingestions only within the first 2 hours. However, the application of activated charcoal and sodium sulphate is always advisable. Forced alkaline diuresis and hemodialysis may be considered. Carefully monitor kidney function. Carefully monitor respiratory function.

## Section 5. Fire Fighting Measures

|   |   |
|---|---|
| <b>Hazard Type</b>  | This product is not flammable.                                  |
| <b>Hazards from combustion products</b>                                   | Harmful. In combustion emits toxic fumes.                       |
| <b>Suitable Extinguishing media</b>                                       | Water spray. Water fog.   |
| <b>Recommended protective clothing &amp; Precautions for firefighters</b> | Wear protective clothing to prevent contact with skin and eyes. |
| <b>HAZCHEM CODE</b>   | <b>3Z</b>   |

## Section 6. Accidental Release Measures

### Personal precautions:

Use protective clothing as per Section 8). Turn leaking containers leak-side up to prevent the escape of liquid.

### Environmental precautions:

Contain the spillage using bunding. Do not discharge into drains or rivers.

### Spill and Disposal procedures:

Absorb into dry earth or sand. Wash the spillage site with large amounts of water. Dispose of waste safely, according to Local Council regulations.

## Section 7. Handling and Storage

### Precautions for Handling:

- Read label before use.
- Do not breathe fumes, vapours and spray.
- Use only outdoors or in a well-ventilated area.
- Contaminated work clothing should not be allowed out of the workplace.
- Wash contaminated clothing before re-use.
- Avoid release to the environment.
- Wear protective clothing as detailed in Section 8.

### Precautions for Storage:

- Store away from incompatible materials listed in Section 10.
- Keep out of reach of children.
- Keep container tightly closed.
- Store in cool, well ventilated area.

- Must only be kept in original packaging.

## Section 8 Exposure Controls / Personal Protection

### WORKPLACE EXPOSURE STANDARDS (provided for guidance only)

| Substance | TWA |                   | STEL |                   |
|-----------|-----|-------------------|------|-------------------|
|           | ppm | mg/m <sup>3</sup> | ppm  | mg/m <sup>3</sup> |

No ingredients have exposure limits

Workplace Exposure Standard – Time Weighted Average (WES-TWA). The time-weighted average exposure standard designed to protect the worker from the effects of long-term exposure. Workplace Exposure Standard – Short-Term Exposure Limit (WESSTEL). The 15-minute average exposure standard. Applies to any 15- Minute period in the working day and is designed to protect the worker against adverse effects of irritation, chronic or irreversible tissue change, or narcosis that may increase the likelihood of accidents. The WES-STEL is not an alternative to the WES-TWA; both the short-term and time-weighted average exposures apply. Workplace Exposure Standards and Biological Exposure Indices NOV 2017 9TH EDITION.

### Engineering Controls / Industrial Hygiene

Ensure there is sufficient ventilation of the area.

### Personal Protection Equipment



|                    |   |
|--------------------|---|
| <b>Eyes</b>        | Wear goggles conforming to EN166 (Field of Use 5 or equivalent).  |
| <b>Hands</b>       | Wear suitable gloves resistant to chemical penetration e.g. nitrile rubber gloves with a minimum thickness of 0.4 mm.   |
| <b>Skin</b>        | Wear standard coverall and type 6 suit.   |
| <b>Respiratory</b> | Respiratory protection not required.  |
| <b>General</b>     | Wash when contaminated. Dispose of when contaminated inside, when perforated or when contamination outside cannot be removed. Wash hands always before eating, drinking, smoking or using the toilet. |

## Section 9 Physical and Chemical Properties

|   |                        |
|---|------------------------|
| <b>Appearance</b>                       | Liquid, Suspo-emulsion |
| <b>Colour</b>                           | Tan                    |
| <b>Odour</b>                            | Characteristic         |
| <b>Odour Threshold</b>                  | Not available          |
| <b>pH</b>                               | 7.5                    |
| <b>Boiling Point</b>                    | Not available          |
| <b>Melting Point</b>                    | Not available          |
| <b>Freezing Point</b>                   | Not available          |
| <b>Flash Point</b>                      | Not available          |
| <b>Flammability</b>                     | Not available          |
| <b>Upper and Lower Explosive Limits</b> | Not available          |
| <b>Vapour Pressure</b>                  | Not available          |
| <b>Vapour Density</b>                   | Not available          |
| <b>Density</b>                          | 1.12 g/L               |
| <b>Water Solubility</b>                 | Not available          |
| <b>Partition Coefficient:</b>           | Not available          |
| <b>Ignition Temperature</b>             | Not available          |
| <b>Decomposition Temperature</b>        | Not available          |
| <b>Kinematic Viscosity</b>              | Not available          |
| <b>Particle Characteristics</b>         | Not available          |

**Section 10. Stability and Reactivity**

|   |  |
|---|--|
| <b>Stability of Substance</b>             | This product is stable under normal conditions.                                      |
| <b>Possibility of hazardous reactions</b> | No hazardous reactions when stored and handled according to prescribed instructions. |
| <b>Conditions to Avoid</b>                | Extremes of temperature and direct sunlight.   |
| <b>Incompatible Materials</b>             | Oxidizing agents.  |
| <b>Hazardous Decomposition Products</b>   | None known.  |

**Section 11 Toxicological Information****Acute Effects:**

|                   |   |
|-------------------|---|
| <b>Swallowed</b>  | May be harmful if swallowed             |
| <b>Dermal</b>     | May be harmful if in contact with skin. |
| <b>Inhalation</b> | Harmful if inhaled.                     |
| <b>Eye</b>        | Causes serious eye irritation.          |
| <b>Skin</b>       | May cause an allergic skin reaction.    |

**Chronic Effects:**

|                               |  |
|-------------------------------|--|
| <b>Carcinogenicity</b>        | Not applicable.  |
| <b>Reproductive Toxicity</b>  | Not applicable.  |
| <b>Germ Cell Mutagenicity</b> | Not applicable.  |
| <b>Aspiration</b>             | Not applicable.  |
| <b>STOT/SE</b>                | Not applicable.  |
| <b>STOT/RE</b>                | May cause damage to organs through prolonged or repeated exposure. |

**Acute Toxicity -**

| <b>Chemical Name</b>         | <b>LD50 (Oral)</b>  | <b>LD50 (Dermal)</b>                    | <b>LC50 (inhalation)</b>  |
|------------------------------|---|---|---|
| Phenmedipham<br>(13684-63-4) | >8000mg/kg (Rats),<br>>4000mg/kg guinea<br>pigs and dogs  | 1000mg/kg (Rabbits)<br>2500mg/kg (Rats) | (4 h) >7.0 mg/l<br>(Rats)   |
| Desmedipham<br>(13684-56-5)  | >10250mg/kg (Rats)<br>>5000mg/kg (mice)                   | >4000mg/kg (Rabbits)                    | (4 h) for rats >7.4<br>mg/l. NOEL (2 y) for<br>rats 3.2 mg/kg<br>daily, for mice 22<br>mg/kg daily. |
| Ethofumesate<br>(26225-79-6) | >5000mg/kg (rats<br>and mice)                             | >2000mg/kg (Rats)                       | >3.97mg/l (Rats)<br>Air (4h)  |
| Metamitron<br>(41394-05-2)   | 2000mg/kg (Rats)<br>1450mg/kg (mice)<br>>1000mg/kg (dogs) | >4000mg/kg (Rats)                       | >0.33mg/l (rats)<br>Air(aerosol)<br>(4hr)   |

**Section 12. Ecotoxicological Information**

|                                       |   |
|---------------------------------------|---|
| <b>Ecological effects information</b> | 9.1A = Very toxic to aquatic life.<br>9.2A = Very toxic to the soil environment.        |
| <b>Persistence and degradability</b>  | No data available   |
| <b>Bioaccumulation</b>                | No data available   |
| <b>Mobility in Soil</b>               | No data available   |
| <b>Other adverse effects</b>          | No data available   |
| <b>Acute fish toxicity:</b>           | <b>Desmedipham:</b><br>LC50 (96 h) for rainbow trout 1.7, bluegill sunfish 3.2<br>mg/l. |

|                              |   |
|------------------------------|---|
|                              | <p><b>Phenmedipham:</b><br/>LC50 (96 h) for rainbow trout 1.4–3.0, bluegill sunfish 3.98 mg/l</p> <p><b>Ethofumesate:</b><br/>LC50 (96 h) for rainbow trout 11.91–20.2, bluegill sunfish 12.37–21.2, mirror carp 10.92 mg/l.</p> <p><b>Metamitron:</b><br/>LC50 (96 h) for golden orfe 443, rainbow trout 326 mg/l.</p> |
| <b>Toxicity for daphnia:</b> | <p><b>Desmedipham:</b><br/>LC50 (48 h) 1.88 mg/l.</p> <p><b>Phenmedipham:</b><br/>LC50 (72 h) 3.8 mg/l.</p> <p><b>Ethofumesate:</b><br/>EC50 (48 h) 13.52–22.0 mg/l.</p> <p><b>Metamitron:</b><br/>LC50 (48 h) 101.7–206 mg/l.</p>  |
| <b>Toxicity to algae:</b>    | <p><b>Desmedipham:</b><br/>IC50 (72 h) 0.061 mg/l.</p> <p><b>Phenmedipham:</b><br/>IC50 (96 h) 0.13 mg/l.</p> <p><b>Ethofumesate:</b><br/>EC50 3.9 mg/l.</p> <p><b>Metamitron:</b><br/>ErC50 for Scenedesmus subspicatus 0.22 mg/l.</p>   |
| <b>Precautions:</b>          | Do not allow to enter waterways.  |

### Section 13. Disposal Considerations

#### Disposal Method:

Triple rinse container and add residue to spray tank. Return empty container to an AgRecovery collection point for disposal.



#### Empty container precautions:

Avoid contamination of any water supply with chemical or empty container.

**Precautions or methods to avoid:** Avoid release to the environment.

### Section 14 Transport Information

This product is classified as a Dangerous Good for transport in NZ ; NZS 5433:2012



#### Road, Rail, Sea and Air Transport

|  |   |
|--|---|
| <b>UN No</b>                                 | 3082  |
| <b>Class - Primary</b>                       | 9   |
| <b>Packing Group</b>                         | III   |
| <b>Proper Shipping Name</b>                  | <b>ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S (Phenmedipham, Desmedipham, Ethofumesate, Metamitron Solution)</b>          |
| <b>Marine Pollutant</b>                      | Yes   |
| <b>Special Provisions-Limited Quantities</b> | If the product's individual container is below 5L/kg, it can be transported as a non-DG as long as the product packaging is still |

|  |  |
|--|--|
|  | labelled as per DG requirements and the driver is given safety information in accordance with Chapter 3.4 of the UNRTDG. |
|--|--|

## Section 15 Regulatory Information

This substance is classified hazardous according to the EPA Hazardous Substances (Classification) Notice 2017

EPA Approval Code: HSR101154

HSNO Classification: 6.1D(inh), 6.1E(Oral,dermal),6.4A, 6.5B, 6.9B, 9.1A, 9.2A, 9.3C

| HSW (HS) Regulations 2017  | Trigger Quantity  |
|--|---|
| Certified Handlers   | Not required  |
| Signage Trigger Quantities (Schedule 3)  | 100L (9.1A)   |
| Emergency Response Plan (Schedule 5)   | 100L (9.1A)   |
| Secondary Containment (Schedule 5)   | 100L(9.1A)  |
| Tracking (Schedule 26)   | Not required  |
| For all further controls   | Refer to EPA <a href="http://www.epa.govt.nz">www.epa.govt.nz</a> for controls document - HSR101154   |
| HSNO Additional Controls (Restrictions of use)   |   |
| 77A  | This substance must not be applied onto or into water.  |
| The maximum level of an impurity in the technical grade active material for this substance is set.                   | The following limits are set for toxicologically relevant impurities in the active ingredient ethofumesate used to manufacture this substance:<br>- ethyl methane sulfonate: 0.1 mg/kg maximum<br>- iso-butyl methane sulfonate: 0.1 mg/kg maximum        |
| A restriction has been placed on the application method for this substance   | This substance must be applied by ground-based methods [1] only<br><br>[1] Ground-based methods of applying pesticides include, but are not limited to, application by ground boom, air blast or knapsack, and do not include aerial application methods. |
| Hazardous Property Controls Notice 2017  |   |
| HPC Notice Part 4 Clause 47  | Equipment for class 9 substances must be appropriate  |
| HPC Notice Part 4 Clause 48  | Records of application of class 9 pesticides and plant growth regulators  |
| HPC Notice Part 4 Subpart A  | Site and storage controls for class 9 substances  |
| HPC Notice Part 4 Subpart C  | Qualifications required for application of class 9 pesticides   |
| ACVM Act and Regulations   |   |
| ACVM Approval No<br>See <a href="http://www.foodsafety.govt.nz">www.foodsafety.govt.nz</a> for registration controls | P9311   |

## Section 16 Other Information

For proper and safe use of this product, please refer to the approval conditions laid down on the product label. The data contained in this safety data sheet is based on our current knowledge and describes the product only with regard to safety requirements. The data does not describe the products properties. Neither should any agreed property nor the suitability of the product for any specific purpose be deduced from the data contained in the safety data sheet. It is the

responsibility of the recipient of the product to ensure any existing laws and legislation are observed.

#### Glossary

|                  |   |
|------------------|---|
| EC <sub>50</sub> | Median effective concentration.   |
| EEL              | Environmental Exposure Limit.   |
| EPA              | Environmental Protection Authority  |
| HSNO             | Hazardous Substances and New Organisms.   |
| HSW              | Health and Safety at Work.  |
| LC <sub>50</sub> | Lethal concentration that will kill 50% of the test organisms inhaling or ingesting it. |
| LD <sub>50</sub> | Lethal dose to kill 50% of test animals/organisms.                                      |
| LEL              | Lower explosive level.  |
| OSHA             | American Occupational Safety and Health Administration.                                 |
| TEL              | Tolerable Exposure Limit.   |
| TLV              | Threshold Limit Value-an exposure limit set by responsible authority.                   |
| UEL              | Upper Explosive Level   |
| WES              | Workplace Exposure Limit  |

#### References:

1. EPA Hazardous Substances (Safety Data Sheets) Notice 2017
2. Workplace Exposure Standards and Biological Exposure Indices Nov 2017 edition.
3. Assigning a hazardous substance to a HSNO Approval (Aug 2013).
4. Transport of Dangerous goods on land NZS 5433:2012
5. HSW (Hazardous Substances) Regulations 2017

#### Disclaimer

This document has been prepared by TCC (NZ) Ltd and serves as the suppliers Safety Data Sheet ('SDS'). It is based on information concerning the product which has been provided to TCC (NZ) Ltd or obtained from third party sources and is believed to represent the current state of knowledge as to the appropriate safety and handling precautions for the product at the time of issue. Further clarification regarding any aspect of the product should be obtained directly from the manufacturer. While TCC (NZ) have taken all due care to include accurate and up-to-date information in this SDS, it does not provide any warranty as to accuracy or completeness. As far as lawfully possible, TCC (NZ) Ltd accept no liability for any loss, injury or damage (including consequential loss) which may be suffered or incurred by any person as a consequence of their reliance on the information contained in this SDS

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Please contact Adria, if further information is required.

Issue Date: 19 July 2018      Review Date: 19 July 2023