

Agriculture Division of DowDuPont

**Issue Date:** 28.07.2016  
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**Product name:** FALLOWBOSS™ TORDON Herbicide

DOW AGROSCIENCES AUSTRALIA LIMITED encourages and expects you to read and understand the entire (M)SDS, as there is important information throughout the document. We expect you to follow the precautions identified in this document unless your use conditions would necessitate other appropriate methods or actions.

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## SECTION 1: IDENTIFICATION: PRODUCT IDENTIFIER AND CHEMICAL IDENTITY

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**Product name:** FALLOWBOSS™ TORDON Herbicide

**Recommended use of the chemical and restrictions on use**

**Identified uses:** End use herbicide product

### COMPANY IDENTIFICATION

DOW AGROSCIENCES AUSTRALIA LIMITED  
LEVEL 9, 67 ALBERT AVENUE  
CHATSWOOD NSW 2067  
AUSTRALIA

**Customer Information Number:**

1800-700-096  
auscustomerservice@dow.com

### EMERGENCY TELEPHONE NUMBER

**24-Hour Emergency Contact:** +61 2 9474 7350

**Local Emergency Contact:** 1800-370-754

**For advice, contact a doctor (at once) or the Australian Poisons Information Centre:** 131 126

**Transport Emergency Only Dial** 000

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## SECTION 2: HAZARD(S) IDENTIFICATION

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### GHS Classification

Acute toxicity - Category 4 - Oral  
Serious eye damage/eye irritation – Category 2A  
Skin sensitisation – Sub-category 1B  
Acute aquatic toxicity - Category 2  
Chronic aquatic toxicity - Category 2

### GHS label elements

#### Hazard pictograms



Signal word: **WARNING!**

**Hazard statements**

Harmful if swallowed.

May cause an allergic skin reaction.

Causes serious eye irritation

Very toxic to aquatic life with long lasting effects.

**Precautionary statements**

**Prevention**

Wash skin thoroughly after handling

Do not eat, drink or smoke when using this product.

Contaminated work clothing should not be allowed out of the workplace.

Avoid release to the environment.

Wear protective gloves/ eye protection/ face protection.

**Response**

If skin irritation or rash occurs: Get medical advice/ attention.

If eye irritation persists: Get medical advice/ attention.

Wash contaminated clothing before re-use.

Collect spillage

**Disposal**

Dispose of contents/ container to an approved waste disposal plant.

**Other hazards**

No data available

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### SECTION 3: COMPOSITION AND INFORMATION ON INGREDIENTS, IN ACCORDANCE WITH SCHEDULE 8

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Component	CASRN	Concentration
2,4-Dichlorophenoxyacetic acid, triisopropanolamine salt	18584-79-7	47.23 %
Picloram triisopropanolamine salt	6753-47-5	11.34 %
Aminopyralid Triisopropanolamine Salt	566191-89-7	1.22 %
Alkylphenol alkoxyate	69029-39-6	< 10.0 %
Triisopropanolamine	122-20-3	< 5.0 %
2,6-Dichlorophenoxyacetic Acid	575-90-6	< 1.0 %
Balance	Not available	<= 29.71 %

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### SECTION 4: FIRST AID MEASURES

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**Description of first aid measures**

**General advice:** First Aid responders should pay attention to self-protection and use the recommended protective clothing (chemical resistant gloves, splash protection). If potential for exposure exists refer to Section 8 for specific personal protective equipment.

**Inhalation:** Move person to fresh air. If person is not breathing, call an emergency responder or ambulance, then give artificial respiration; if by mouth to mouth use rescuer protection (pocket mask etc). Call a poison control center or doctor for treatment advice

**Skin contact:** Take off contaminated clothing. Wash skin with soap and plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice. Wash clothing before re-use. Shoes and other leather items which cannot be decontaminated should be disposed of properly. -

**Eye contact:** Hold eyes open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eyes. Call a poison control center or doctor for treatment advice. Suitable emergency eye wash facility should be available in work area.

**Ingestion:** Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Never give anything by mouth to an unconscious person.

**Most important symptoms and effects, both acute and delayed:** Aside from the information found under Description of first aid measures (above) and Indication of immediate medical attention and special treatment needed (below), any additional important symptoms and effects are described in Section 11: Toxicology Information.

**Indication of any immediate medical attention and special treatment needed**

**Notes to physician:** No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient. Have the Safety Data Sheet, and if available, the product container or label with you when calling a poison control center or doctor, or going for treatment.

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## SECTION 5: FIREFIGHTING MEASURES

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**Hazchem Code:** ●2X

**Suitable extinguishing media:** Water fog or fine spray. Dry chemical fire extinguishers. Carbon dioxide fire extinguishers. Foam. Alcohol resistant foams (ATC type) are preferred. General purpose synthetic foams (including AFFF) or protein foams may function, but will be less effective.

**Unsuitable extinguishing media:** No data available.

**Special hazards arising from the substance or mixture**

**Hazardous combustion products:** Under fire conditions some components of this product may decompose. The smoke may contain unidentified toxic and/or irritating compounds. Combustion products may include and are not limited to: Nitrogen oxides. Hydrogen chloride. Carbon monoxide. Carbon dioxide.

**Unusual Fire and Explosion Hazards:** This material will not burn until the water has evaporated. Residue can burn.

**Advice for firefighters**

**Fire Fighting Procedures:** Keep people away. Isolate fire and deny unnecessary entry. Use water spray to cool fire exposed containers and fire affected zone until fire is out and danger of re-ignition has passed. Burning liquids may be extinguished by dilution with water. Burning liquids may be moved by flushing with water to protect personnel and minimize property damage. Contain fire water run-off if possible. Fire water run-off, if not contained, may cause environmental damage. Review the "Accidental Release Measures" and the "Ecological Information" sections of this (M)SDS.

**Special protective equipment for firefighters:** Wear positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots, and gloves). If protective equipment is not available or not used, fight fire from a protected location or safe distance.

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## SECTION 6: ACCIDENTAL RELEASE MEASURES

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**Personal precautions, protective equipment and emergency procedures:** Isolate area. Keep unnecessary and unprotected personnel from entering the area. Refer to section 7, Handling, for additional precautionary measures. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.

**Environmental precautions:** Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information.

**Methods and materials for containment and cleaning up:** Contain spilled material if possible. Small spills: Absorb with materials such as: Clay. Dirt. Sand. Sweep up. Collect in suitable and properly labeled containers. Large spills: Contact Dow AgroSciences for clean-up assistance. See Section 13, Disposal Considerations, for additional information.

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## SECTION 7: HANDLING AND STORAGE, INCLUDING HOW THE CHEMICAL MAY BE SAFELY USED

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**Precautions for safe handling:** Keep out of reach of children. Do not swallow. Avoid contact with eyes, skin, and clothing. Avoid breathing vapor or mist. Avoid prolonged or repeated contact with skin. Wash thoroughly after handling. Use with adequate ventilation. Spills of these organic materials on hot fibrous insulations may lead to lowering of the autoignition temperatures possibly resulting in spontaneous combustion. See Section 8, EXPOSURE CONTROLS AND PERSONAL PROTECTION.

**Conditions for safe storage:** Store in a dry place. Store in original container. Keep container tightly closed when not in use. Do not store near food, foodstuffs, drugs or potable water supplies.

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## SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

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### Control parameters

Exposure limits are listed below, if they exist.

Component	Regulation	Type of listing	Value/Notation
Alkylphenol alkoxyate	Dow IHG	TWA	2 mg/m <sup>3</sup>
Triisopropanolamine	Dow IHG	TWA	10 mg/m <sup>3</sup>

RECOMMENDATIONS IN THIS SECTION ARE FOR MANUFACTURING, COMMERCIAL BLENDING AND PACKAGING WORKERS. APPLICATORS AND HANDLERS SHOULD SEE THE PRODUCT LABEL FOR PROPER PERSONAL PROTECTIVE EQUIPMENT AND CLOTHING.

### Exposure controls

**Engineering controls:** Use local exhaust ventilation, or other engineering controls to maintain airborne levels below exposure limit requirements or guidelines. If there are no applicable exposure

limit requirements or guidelines, general ventilation should be sufficient for most operations. Local exhaust ventilation may be necessary for some operations.

**Individual protection measures**

**Eye/face protection:** Use chemical goggles.

**Skin protection**

**Hand protection** Use chemical resistant gloves classified under standard AS/NZS 2161.10: Protective gloves against chemicals and micro-organisms. Examples of preferred glove barrier materials include: Butyl rubber. Natural rubber ("latex"). Neoprene. Nitrile/butadiene rubber ("nitrile" or "NBR"). Polyethylene. Ethyl vinyl alcohol laminate ("EVAL"). Polyvinyl chloride ("PVC" or "vinyl"). When prolonged or frequently repeated contact may occur, a glove with a protection class of 5 or higher (breakthrough time greater than 240 minutes according to AS/NZS 2161.10) is recommended. When only brief contact is expected, a glove with a protection class of 3 or higher (breakthrough time greater than 60 minutes according to AS/NZS 2161.10) is recommended. NOTICE: The selection of a specific glove for a particular application and duration of use in a workplace should also take into account all relevant workplace factors such as, but not limited to: Other chemicals which may be handled, physical requirements (cut/puncture protection, dexterity, thermal protection), potential body reactions to glove materials, as well as the instructions/specifications provided by the glove supplier.

**Other protection:** Use protective clothing chemically resistant to this material. Selection of specific items such as face shield, boots, apron, or full body suit will depend on the task.

**Respiratory protection:** Respiratory protection should be worn when there is a potential to exceed the exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, wear respiratory protection when adverse effects, such as respiratory irritation or discomfort have been experienced, or where indicated by your risk assessment process. For most conditions no respiratory protection should be needed; however, if discomfort is experienced, use an approved air-purifying respirator.

The following should be effective types of air-purifying respirators: Organic vapour cartridge with a particulate pre-filter.

**Other Information:** Selection and use of personal protective equipment should be in accordance with the recommendations in one or more of the relevant Australian/New Zealand Standards, including:

AS/NZS 1336: Eye and face protection – Guidelines.

AS/NZS 1337: Personal eye protection - Eye and face protectors for occupational applications.

AS/NZS 1715: Selection, use and maintenance of respiratory protective equipment.

AS/NZS 2161: Occupational protective gloves.

AS/NZS 2210: Occupational protective footwear.

AS/NZS 4501: Occupational protective clothing Set

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**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

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**Appearance**

<b>Physical state</b>	Liquid.
<b>Colour</b>	Brown
<b>Odour</b>	Characteristic
<b>Odour Threshold</b>	No test data available
<b>pH</b>	6.9 <i>pH Electrode</i>
<b>Melting point/range</b>	Not applicable
<b>Freezing point</b>	Not determined
<b>Boiling point (760 mmHg)</b>	Not determined
<b>Flash point - closed cup</b>	> 100 °C <i>Pensky-Martens Closed Cup ASTM D 93</i>
<b>Evaporation Rate (Butyl Acetate = 1)</b>	Not determined
<b>Flammability (solid, gas)</b>	Not applicable
<b>Lower explosion limit</b>	Not determined
<b>Upper explosion limit</b>	Not determined
<b>Vapour Pressure</b>	Not determined
<b>Relative Vapour Density (air = 1)</b>	Not determined
<b>Relative Density (water = 1)</b>	1.187 at 20 °C <i>Digital Density Meter (Oscillating Coil)</i>
<b>Water solubility</b>	Not determined
<b>Partition coefficient: n-octanol/water</b>	No data available
<b>Auto-ignition temperature</b>	Not determined
<b>Decomposition temperature</b>	No test data available
<b>Dynamic Viscosity</b>	293.3 mPa.s at 20 °C 77.6 mPa.s at 40 °C
<b>Kinematic Viscosity</b>	No data available
<b>Explosive properties</b>	No test data available
<b>Oxidizing properties</b>	No test data available
<b>Liquid Density</b>	1.187 g/cm <sup>3</sup>
<b>Molecular weight</b>	No data available

NOTE: The physical data presented above are typical values and should not be construed as a specification.

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**SECTION 10: STABILITY AND REACTIVITY**

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**Reactivity:** No data available.

**Chemical stability:** Thermally stable at typical use temperatures

**Possibility of hazardous reactions:** Polymerization will not occur.

**Conditions to avoid:** Some components of this product can decompose at elevated temperatures. Generation of gas during decomposition can cause pressure in closed systems.

**Incompatible materials:** Avoid contact with: Strong acids. Strong bases. Strong oxidizers.

**Hazardous decomposition products:** Decomposition products depend upon temperature, air supply and the presence of other materials. Decomposition products can include and are not limited to: Hydrogen chloride. Nitrogen oxides.

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## **SECTION 11: TOXICOLOGICAL INFORMATION**

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*Toxicological information appears in this section when such data is available.*

### **Acute toxicity**

#### **Acute oral toxicity**

Low toxicity if swallowed. Small amounts swallowed incidentally as a result of normal handling operations are not likely to cause injury; however, swallowing larger amounts may cause injury. As product: LD50, Rat, female, 1,000 mg/kg

#### **Acute dermal toxicity**

Prolonged skin contact is unlikely to result in absorption of harmful amounts. As product: LD50, Rat, male and female, > 5,000 mg/kg

#### **Acute inhalation toxicity**

No adverse effects are anticipated from single exposure to mist. Based on the available data, respiratory irritation was not observed. LC50, Rat, male and female, 4 Hour, dust/mist, > 5.05 mg/l No deaths occurred at this concentration.

### **Skin corrosion/irritation**

Brief contact is essentially non-irritating to skin.

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

May cause moderate eye irritation.  
May cause slight corneal injury.

### **Sensitization**

Has demonstrated the potential for contact allergy in mice.  
For respiratory sensitization: No relevant data found.

### **Specific Target Organ Systemic Toxicity (Single Exposure)**

Product test data not available. Refer to component data.

### **Specific Target Organ Systemic Toxicity (Repeated Exposure)**

For the active ingredient(s): In animals, effects have been reported on the following organs: Eye. Gastrointestinal tract. Kidney. Liver. Thyroid.  
Observations in animals include: Nausea and/or vomiting.

Based on information for component(s): In animals, effects have been reported on the following organs: Kidney. Liver.

**Carcinogenicity**

For similar active ingredient(s). Picloram. Aminopyralid. Did not cause cancer in laboratory animals. Various animal cancer tests have shown no reliably positive association between 2,4-D exposure and cancer. Epidemiology studies on herbicide use have been both positive and negative with the majority being negative.

**Teratogenicity**

For the active ingredient(s): 2,4-Dichlorophenoxyacetic acid, Triisopropanolamine salt Has caused birth defects in lab animals only at doses producing severe toxicity in the mother.

**Reproductive toxicity**

For similar active ingredient(s). 2,4-Dichlorophenoxyacetic acid. In laboratory animals, excessive doses toxic to the parent animals caused decreased weight and survival of offspring.

For the minor component(s): Studies in laboratory animals indicate that diethylene glycol monoethyl ether (DEGEE) is not a reproductive toxicant even when given in large amounts (a few percent in the drinking water). However, at the highest doses, it caused some toxic effects in offspring of treated animals: increased liver weight, decreased brain weight, reduced sperm motility.

**Mutagenicity**

For similar active ingredient(s). Aminopyralid. In vitro genetic toxicity studies were predominantly negative. Animal genetic toxicity studies were negative.

**Aspiration Hazard**

Based on physical properties, not likely to be an aspiration hazard.

**COMPONENTS INFLUENCING TOXICOLOGY:**

**Aminopyralid Triisopropanolamine Salt**

**Specific Target Organ Systemic Toxicity (Single Exposure)**

Evaluation of available data suggests that this material is not an STOT-SE toxicant.

**Alkylphenol alkoxyate**

**Specific Target Organ Systemic Toxicity (Single Exposure)**

Evaluation of available data suggests that this material is not an STOT-SE toxicant.

**Triisopropanolamine**

**Specific Target Organ Systemic Toxicity (Single Exposure)**

Evaluation of available data suggests that this material is not an STOT-SE toxicant.

**2,6-Dichlorophenoxyacetic Acid**

**Specific Target Organ Systemic Toxicity (Single Exposure)**

May cause respiratory irritation.

Route of Exposure: Inhalation



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**SECTION 12: ECOLOGICAL INFORMATION**

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*Ecotoxicological information appears in this section when such data is available.*

**Ecotoxicity****2,4-Dichlorophenoxyacetic acid, triisopropanolamine salt****Acute toxicity to fish**

Material is moderately toxic to aquatic organisms on an acute basis (LC50/EC50 between 1 and 10 mg/L in the most sensitive species tested).

LC50, Oncorhynchus mykiss (rainbow trout), static test, 96 Hour, 317 mg/l, OECD Test Guideline 203 or Equivalent

**Acute toxicity to aquatic invertebrates**

LC50, Daphnia magna (Water flea), static test, 48 Hour, 748 mg/l

**Acute toxicity to algae/aquatic plants**

ErC50, Pseudokirchneriella subcapitata (green algae), 5 d, 103 mg/l

EC50, Lemna minor (duckweed), 14 d, 2.37 mg/l

**Toxicity to Above Ground Organisms**

Material is moderately toxic to birds on an acute basis (LD50 between 51 and 500 mg/kg).

Material is practically non-toxic to birds on a dietary basis (LC50 > 5000 ppm).

Oral LD50, Colinus virginianus (Bobwhite quail), 405 mg/kg

Dietary LC50, Colinus virginianus (Bobwhite quail), > 5,620 ppm

**Picloram triisopropanolamine salt****Acute toxicity to fish**

Based on information for a similar material: Material is highly toxic to aquatic organisms on an acute basis (LC50/EC50 between 0.1 and 1 mg/L in the most sensitive species tested).

LC50, Oncorhynchus mykiss (rainbow trout), static test, 96 Hour, 51 mg/l

**Acute toxicity to aquatic invertebrates**

LC50, Daphnia magna (Water flea), static test, 48 Hour, 125 mg/l

**Acute toxicity to algae/aquatic plants**

Based on information for a similar material: ErC50, Myriophyllum spicatum, 14 d, 0.558 mg/l

Based on information for a similar material: NOEC, Myriophyllum spicatum, 14 d, 0.0095 mg/l

**Chronic toxicity to fish**

NOEC, Pimephales promelas (fathead minnow), 28 d, 7.19 mg/l

**Aminopyralid Triisopropanolamine Salt****Acute toxicity to fish**

For similar material(s): Material is practically non-toxic to aquatic organisms on an acute basis (LC50/EC50/EL50/LL50 >100 mg/L in the most sensitive species tested).

For similar material(s): LC50, Oncorhynchus mykiss (rainbow trout), 96 Hour, 360 mg/l

**Acute toxicity to aquatic invertebrates**

For similar material(s): EC50, Daphnia magna (Water flea), 48 Hour, > 460 mg/l

**Acute toxicity to algae/aquatic plants**

For similar material(s): ErC50, Pseudokirchneriella subcapitata (green algae), 72 Hour, > 1,000 mg/l

**Toxicity to Above Ground Organisms**

Based on information for a similar material:

Material is practically non-toxic to birds on an acute basis (LD50 > 2000 mg/kg).

Material is practically non-toxic to birds on a dietary basis (LC50 > 5000 ppm).

**Alkylphenol alkoxylate**

**Acute toxicity to fish**

Material is moderately toxic to aquatic organisms on an acute basis (LC50/EC50 between 1 and 10 mg/L in the most sensitive species tested).

LC50, *Lepomis macrochirus* (Bluegill sunfish), static test, 96 Hour, 4.8 mg/l, OECD Test Guideline 203 or Equivalent

LC50, *Oncorhynchus mykiss* (rainbow trout), static test, 96 Hour, 3.7 mg/l, OECD Test Guideline 203 or Equivalent

**Acute toxicity to aquatic invertebrates**

LC50, *Daphnia magna* (Water flea), 48 Hour, 10.5 mg/l, OECD Test Guideline 202 or Equivalent

**Toxicity to Above Ground Organisms**

Dietary LC50, *Apis mellifera* (bees), 2 d, > 105micrograms/bee

Contact LD50, *Apis mellifera* (bees), 2 d, > 100micrograms/bee

No Observed Effects Level (NOEL), *Colinus virginianus* (Bobwhite quail), 2,250 mg/kg

Oral LD50, *Colinus virginianus* (Bobwhite quail), > 2,250 mg/kg

**Triisopropanolamine**

**Acute toxicity to fish**

Material is practically non-toxic to aquatic organisms on an acute basis (LC50/EC50/EL50/LL50 >100 mg/L in the most sensitive species tested).

LC50, *Leuciscus idus* (Golden orfe), static test, 96 Hour, 3,158.4 mg/l, DIN 38412

**Acute toxicity to aquatic invertebrates**

EC50, *Daphnia magna* (Water flea), static test, 48 Hour, > 500 mg/l, OECD Test Guideline 202 or Equivalent

**Acute toxicity to algae/aquatic plants**

EC50, alga *Scenedesmus* sp., static test, 72 Hour, Growth rate inhibition, 710 mg/l, EU Method C.3 (Algal Inhibition test)

**Toxicity to bacteria**

EC10, activated sludge, 30 min, > 1,195 mg/l

**2,6-Dichlorophenoxyacetic Acid**

**Acute toxicity to fish**

Material is highly toxic to aquatic organisms on an acute basis (LC50/EC50 between 0.1 and 1 mg/L in the most sensitive species tested).

For similar material(s): LC50, *Pimephales promelas* (fathead minnow), static test, 96 Hour, 133 - 320 mg/l

For similar material(s): LC50, *Poecilia reticulata* (guppy), static test, 96 Hour, 8.4 - 70.7 mg/l

**Acute toxicity to aquatic invertebrates**

For similar material(s): EC50, *Daphnia magna* (Water flea), static test, 48 Hour, 25 - 262 mg/l

For similar material(s): LC50, stonefly *Pteronarcys californica*, static test, 96 Hour, 1.6 - 15 mg/l

**Acute toxicity to algae/aquatic plants**

For similar material(s): EC50, Pseudokirchneriella subcapitata (green algae), 96 Hour, 24.2 mg/l

For similar material(s): EbC50, diatom Navicula sp., static test, 5 d, Biomass, 2.02 mg/l

For similar material(s): EC50, Lemna gibba, 14 d, 0.58 mg/l

Estimated.

ErC50, diatom Navicula sp., static test, 72 Hour, > 100 mg/l

**Chronic toxicity to fish**

NOEC, Pimephales promelas (fathead minnow), 32 d, growth, 63.4 mg/l

LOEC, Pimephales promelas (fathead minnow), 32 d, growth, 100.9 mg/l

MATC (Maximum Acceptable Toxicant Level), Pimephales promelas (fathead minnow), 32 d, growth, 80 mg/l

**Chronic toxicity to aquatic invertebrates**

For similar material(s): NOEC, Daphnia magna (Water flea), 21 d, number of offspring, 46.2 mg/l

**Balance****Acute toxicity to fish**

No relevant data found.

**Persistence and degradability****2,4-Dichlorophenoxyacetic acid, triisopropanolamine salt**

**Biodegradability:** For similar active ingredient(s). 2,4-Dichlorophenoxyacetic acid. Material is readily biodegradable. Passes OECD test(s) for ready biodegradability.

**Picloram triisopropanolamine salt**

**Biodegradability:** For similar active ingredient(s). Picloram. Based on stringent OECD test guidelines, this material cannot be considered as readily biodegradable; however, these results do not necessarily mean that the material is not biodegradable under environmental conditions. Biodegradation may occur under aerobic conditions (in the presence of oxygen). Surface photodegradation is expected with exposure to sunlight.

**Aminopyralid Triisopropanolamine Salt**

**Biodegradability:** For similar material(s): Aminopyralid. Material is not readily biodegradable according to OECD/EEC guidelines.

**Alkylphenol alkoxyate**

**Biodegradability:** Biodegradation under aerobic laboratory conditions is below detectable limits (BOD20 or BOD28/ThOD < 2.5%).

**Theoretical Oxygen Demand:** 2.35 mg/mg

**Chemical Oxygen Demand:** 1.78 mg/mg

**Triisopropanolamine**

**Biodegradability:** Biodegradation under aerobic static laboratory conditions is high (BOD20 or BOD28/ThOD > 40%). Biodegradation rate may increase in soil and/or water with acclimation. Material is not readily biodegradable according to OECD/EEC guidelines.

10-day Window: Fail

**Biodegradation:** 0 %

**Exposure time:** 28 d

**Method:** OECD Test Guideline 301F or Equivalent

**Theoretical Oxygen Demand:** 2.35 mg/mg

**Photodegradation**

**Test Type:** Half-life (indirect photolysis)

**Sensitizer:** OH radicals

**Atmospheric half-life:** 3 Hour

**Method:** Estimated.

**2,6-Dichlorophenoxyacetic Acid**

**Biodegradability:** Based on information for a similar material: Material is readily biodegradable.

Passes OECD test(s) for ready biodegradability.

10-day Window: Pass

**Biodegradation:** 99 %

**Exposure time:** 28 d

**Method:** OECD Test Guideline 301F or Equivalent

**Balance**

**Biodegradability:** No relevant data found.

**Bioaccumulative potential**

**Bioaccumulation:** No data available.

**Mobility in Soil**

**2,4-Dichlorophenoxyacetic acid, triisopropanolamine salt**

For similar active ingredient(s). 2,4-Dichlorophenoxyacetic acid. Potential for mobility in soil is very high (Koc between 0 and 50).

**Picloram triisopropanolamine salt**

For similar active ingredient(s). Picloram. Potential for mobility in soil is very high (Koc between 0 and 50).

**Aminopyralid Triisopropanolamine Salt**

For similar active ingredient(s). Aminopyralid. Potential for mobility in soil is very high (Koc between 0 and 50).

**Alkylphenol alkoxyate**

No data available.

**Triisopropanolamine**

Potential for mobility in soil is very high (Koc between 0 and 50).

**Partition coefficient (Koc):** 10 Estimated.

**2,6-Dichlorophenoxyacetic Acid**

For similar material(s): Potential for mobility in soil is very high (Koc between 0 and 50).

**Partition coefficient (Koc):** 5 - 212 Measured

**Balance**

No relevant data found.

**Results of PBT and vPvB assessment**

**2,4-Dichlorophenoxyacetic acid, triisopropanolamine salt**

This substance is not considered to be persistent, bioaccumulating and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulating (vPvB).

**Picloram triisopropanolamine salt**

This substance has not been assessed for persistence, bioaccumulation and toxicity (PBT).

**Aminopyralid Triisopropanolamine Salt**

This substance is not considered to be persistent, bioaccumulating and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulating (vPvB).

**Alkylphenol alkoxyate**

This substance has not been assessed for persistence, bioaccumulation and toxicity (PBT).

**Triisopropanolamine**

This substance is not considered to be persistent, bioaccumulating and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulating (vPvB).

**2,6-Dichlorophenoxyacetic Acid**

This substance is not considered to be persistent, bioaccumulating and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulating (vPvB).

**Balance**

This substance has not been assessed for persistence, bioaccumulation and toxicity (PBT).

**Other adverse effects**

**2,4-Dichlorophenoxyacetic acid, triisopropanolamine salt**

This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

**Picloram triisopropanolamine salt**

This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

**Aminopyralid Triisopropanolamine Salt**

No relevant data found.

**Alkylphenol alkoxyate**

This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

**Triisopropanolamine**

This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

**2,6-Dichlorophenoxyacetic Acid**

This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

**Balance**

This substance is not on the Montreal Protocol list of substances that deplete the ozone layer.

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**SECTION 13: DISPOSAL CONSIDERATIONS**

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**Disposal methods:** If wastes and/or containers cannot be disposed of according to the product label directions, disposal of this material must be in accordance with your local or area regulatory authorities. This information presented below only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal

methods in compliance with applicable regulations. If the material as supplied becomes a waste, follow all applicable regional, national and local laws.

This product when disposed of in its unused and uncontaminated state should be treated as a hazardous waste.

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## SECTION 14: TRANSPORT INFORMATION

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### ADG

<b>Proper shipping name</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.(2,4-dichlorophenoxyacetic acid)
<b>UN number</b>	UN 3082
<b>Class</b>	9
<b>Packing group</b>	III
<b>Marine pollutant</b>	2,4-dichlorophenoxyacetic acid

### Classification for SEA transport (IMO-IMDG):

<b>Proper shipping name</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.(2,4-dichlorophenoxyacetic acid)
<b>UN number</b>	UN 3082
<b>Class</b>	9
<b>Packing group</b>	III
<b>Marine pollutant</b>	2,4-dichlorophenoxyacetic acid
<b>Transport in bulk according to Annex I or II of MARPOL 73/78 and the IBC or IGC Code</b>	Consult IMO regulations before transporting ocean bulk

### Classification for AIR transport (IATA/ICAO):

<b>Proper shipping name</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.(2,4-dichlorophenoxyacetic acid)
<b>UN number</b>	UN 3082
<b>Class</b>	9
<b>Packing group</b>	III

### Hazchem Code

●2X

### Further information:

Environmentally Hazardous Substances meeting the descriptions of UN 3077 or UN 3082 are not subject to the Australian Code for the Transport of Dangerous Goods (ADG). This applies when transported by road or rail in packagings that do not incorporate a receptacle exceeding 500 kg(L) or IBCs per ADG Special Provision AU01.

This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. Transportation classifications may vary by container volume and may be influenced by regional or country variations in regulations. Additional transportation system information can be obtained through an authorized sales or customer service representative. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

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**SECTION 15: REGULATORY INFORMATION**

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**Poison Schedule:** S6

**APVMA Approval Number:** 69106

**Australia Inventory of Chemical Substances (AICS)**

The product is used in a biocide/pesticide application and is subject to the applicable regulation. It contains a component exempt from inventory listing requirements. Because an intentional component of the product is not on the inventory, the product may only be used in the exempt application.

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**SECTION 16: ANY OTHER RELEVANT INFORMATION**

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**Revision**

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Most recent revision(s) are noted by the bold, double bars in left-hand margin throughout this document.

**Legend**

Dow IHG	Dow Industrial Hygiene Guideline
TWA	Time weighted average

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