

Agriculture Division of DowDuPont

**Product name:** PIXXARO™ Herbicide

**Issue Date:** 08.12.2017

**Print Date:** 08.12.2017

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.

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

**Product name:** PIXXARO™ 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](mailto: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

## SECTION 2: HAZARD(S) IDENTIFICATION

### GHS Classification

Serious eye damage/eye irritation - Category 1

Skin sensitisation - Sub-category 1B

Specific target organ toxicity - single exposure - Category 3

Acute aquatic toxicity - Category 1

Chronic aquatic toxicity - Category 1

### GHS label elements

#### Hazard pictograms



Signal word: **DANGER!**

**Hazard statements**

May cause an allergic skin reaction.  
Causes serious eye damage.  
May cause respiratory irritation.  
Very toxic to aquatic life with long lasting effects.

**Precautionary statements**

**Prevention**

Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.  
Avoid release to the environment.  
Wear protective gloves/ eye protection/ face protection.

**Response**

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/ physician if you feel unwell.  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/ physician.  
If skin irritation or rash occurs: Get medical advice/ attention.  
Wash contaminated clothing before reuse.  
Collect spillage.

**Storage**

Store in a well-ventilated place. Keep container tightly closed.

**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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This product is a mixture.

Component	CASRN	Concentration
Fluroxypyr 1-methylheptyl ester	81406-37-3	34.91%
Halauxifen-methyl	943831-98-9	1.64%
Cloquintocet-mexyl	99607-70-2	1.57%
Reaction mass of N,N-dimethyldecan-1-amide and N,N-dimethyloctanamide	Not available	> 30.0 - < 50.0 %
Hydrocarbons, C10, aromatics, <1% naphthalene	Not available	> 2.5 - < 10.0 %
Polyethylene glycol mono(tristyrylphenyl)ether	99734-09-5	> 2.5 - < 10.0 %
Benzenesulfonic acid, mono-C11-13-branched alkyl derivs., calcium salts	68953-96-8	> 2.5 - < 3.0 %
N-Methyl-2-pyrrolidone	872-50-4	> 0.1 - < 0.3 %

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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. If breathing is difficult, oxygen should be administered by qualified personnel.

**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:** Wash immediately and continuously with flowing water for at least 30 minutes. Remove contact lenses after the first 5 minutes and continue washing. Obtain prompt medical consultation, preferably from an ophthalmologist. Suitable emergency eye wash facility should be immediately available.

**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:** Chemical eye burns may require extended irrigation. Obtain prompt consultation, preferably from an ophthalmologist. 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. Skin contact may aggravate pre-existing dermatitis.

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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:** Do not use direct water stream. May spread fire.

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

**Hazardous combustion products:** During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating. Combustion products may include and are not limited to: Sulfur oxides. Nitrogen oxides. Hydrogen fluoride. Hydrogen chloride. Carbon monoxide. Carbon dioxide.

**Unusual Fire and Explosion Hazards:** Violent steam generation or eruption may occur upon application of direct water stream to hot liquids.

**Advice for firefighters**

**Fire Fighting Procedures:** Keep people away. Isolate fire and deny unnecessary entry. Consider feasibility of a controlled burn to minimize environment damage. Foam fire extinguishing system is preferred because uncontrolled water can spread possible contamination. Burning liquids may be extinguished by dilution with water. Do not use direct water stream. May spread fire. Burning liquids may be moved by flushing with water to protect personnel and minimize property damage. Avoid accumulation of water. Product may be carried across water surface spreading fire or contacting an ignition source.

**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:** Evacuate area. Only trained and properly protected personnel must be involved in clean-up operations. Keep upwind of spill. Ventilate area of leak or spill. 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:** Spills or discharge to natural waterways is likely to kill aquatic organisms. 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 get in eyes. Do not swallow. Avoid breathing vapour or mist. Avoid contact with skin and clothing. Avoid prolonged or repeated contact with skin. Wash thoroughly after handling. Keep container closed. Use with adequate ventilation. 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
Fluroxypyr 1-methylheptyl ester	Dow IHG	TWA	10 mg/m <sup>3</sup>
N-Methyl-2-pyrrolidone	US WEEL	TWA	10 ppm SKIN
	AU OEL	STEL	309 mg/m <sup>3</sup> 75 ppm SKIN
	AU OEL	TWA	103 mg/m <sup>3</sup> 25 ppm SKIN

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.

**Biological occupational exposure limits**

Components	CAS-No.	Control parameters	Biological specimen	Sampling time	Permissible concentration	Basis
N-Methyl-2-pyrrolidone	872-50-4	5-Hydroxy-N-methyl-2-pyrrolidone	Urine	End of shift (As soon as possible after exposure ceases)	100 mg/l	ACGIH BEI

**Exposure controls**

**Engineering controls:** Use engineering controls to maintain airborne level below exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, use only with adequate ventilation. 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. Chlorinated polyethylene. Polyethylene. Ethyl vinyl alcohol laminate ("EVAL"). Examples of acceptable glove barrier materials include: Natural rubber ("latex").

Neoprene. Nitrile/butadiene rubber ("nitrile" or "NBR"). Polyvinyl chloride ("PVC" or "vinyl"). Viton.

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, use an approved respirator. Selection of air-purifying or positive-pressure supplied-air will depend on the specific operation and the potential airborne concentration of the material. For emergency conditions, use an approved positive-pressure self-contained breathing apparatus.

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**

Physical state	Liquid.
Colour	Yellow
Odour	Mild
Odour Threshold	No data available
pH	4.95 1% pH Electrode
Melting point/range	Not applicable to liquids
Freezing point	No data available
Boiling point (760 mmHg)	No data available
Flash point	<b>closed cup</b> > 100 °C <i>Pensky-Martens Closed Cup ASTM D 93</i>
Evaporation Rate (Butyl Acetate = 1)	No data available
Flammability (solid, gas)	No data available
Lower explosion limit	No data available
Upper explosion limit	No data available
Vapour Pressure	No data available
Relative Vapour Density (air = 1)	No data available
Relative Density (water = 1)	No data available
Water solubility	No data available
Partition coefficient: n-octanol/water	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Dynamic Viscosity	48.15 mPa.s at 20 °C; 18.4 mPa.s at 40 °C
Kinematic Viscosity	No data available
Explosive properties	No
Oxidizing properties	No significant increase (>5C) in temperature.
Liquid Density	1.0252 g/cm <sup>3</sup> at 20 °C <i>Digital density meter</i>
Molecular weight	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 dangerous reaction known under conditions of normal use.

**Chemical stability:** Thermally stable at recommended temperatures and pressures.

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

**Conditions to avoid:** Exposure to elevated temperatures can cause product to decompose.

**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: Carbon monoxide. Carbon dioxide. Hydrogen chloride. Hydrogen fluoride. Nitrogen oxides. Sulfur 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, 5,000 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

Prolonged excessive exposure to mist may cause adverse effects. May cause respiratory irritation and central nervous system depression.

As product: LC50, Rat, male and female, 4 Hour, Aerosol, > 5.57 mg/l

### Skin corrosion/irritation

Brief contact may cause slight skin irritation with local redness.  
May cause drying and flaking of the skin.

### Serious eye damage/eye irritation

May cause severe irritation with corneal injury which may result in permanent impairment of vision, even blindness. Chemical burns may occur.

### Sensitization

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

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

May cause respiratory irritation.

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

For the active ingredient(s): In animals, effects have been reported on the following organs: Bone marrow. Kidney. Liver. Thymus. Thyroid. Bladder.

For the solvent(s): Based on available data, repeated exposures are not anticipated to cause significant adverse effects.

For the minor component(s): In animals, effects have been reported on the following organs: Kidney.



**Carcinogenicity**

For the active ingredient(s): Cloquintocet-mexyl. For similar active ingredient(s). Fluroxypyr. Halauxifen. Did not cause cancer in laboratory animals.

**Teratogenicity**

For the active ingredient(s): Has been toxic to the foetus in laboratory animals at doses toxic to the mother. Did not cause birth defects in laboratory animals.

For the solvent(s): Did not cause birth defects or any other foetal effects in laboratory animals.

**Reproductive toxicity**

For the active ingredient(s): Cloquintocet-mexyl. Fluroxypyr-meptyl. For similar active ingredient(s). Halauxifen. In animal studies, did not interfere with reproduction.

**Mutagenicity**

For the active ingredient(s): For the solvent(s): In vitro genetic toxicity studies were negative. Animal genetic toxicity studies were negative.

**Aspiration Hazard**

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

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**SECTION 12: ECOLOGICAL INFORMATION**

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

**Ecotoxicity****Acute toxicity to algae/aquatic plants**

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

ErC50, Myriophyllum spicatum, 14 d, 0.0445 mg/l

NOEC, Myriophyllum spicatum, 14 d, 0.00791 mg/l

**Toxicity to Above Ground Organisms**

Material is slightly toxic to birds on an acute basis (LD50 between 501 and 2000 mg/kg).

Oral LD50, Colinus virginianus (Bobwhite quail), mortality, 784mg/kg bodyweight.

**Persistence and degradability****Fluroxypyr 1-methylheptyl ester**

**Biodegradability:** Material is not readily biodegradable according to OECD/EEC guidelines.

10-day Window: Fail

**Biodegradation:** 32 %

**Exposure time:** 28 d

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

**Theoretical Oxygen Demand:** 2.2 mg/mg

**Stability in Water (1/2-life):** Hydrolysis, half-life, 454 d

**Halauxifen-methyl**

**Biodegradability:** For similar active ingredient(s). Halauxifen. Material is expected to biodegrade very slowly (in the environment). Fails to pass OECD/EEC tests for ready biodegradability.

10-day Window: Not applicable

**Biodegradation:** 7.7 %  
**Exposure time:** 28 d  
**Method:** OECD Test Guideline 310 or Equivalent

**Cloquintocet-mexyl**

**Biodegradability:** No relevant data found.

**Reaction mass of N,N-dimethyldecan-1-amide and N,N-dimethyloctanamide**

**Biodegradability:** Material is readily biodegradable. Passes OECD test(s) for ready biodegradability.

10-day Window: Pass

**Biodegradation:** > 80 %

**Exposure time:** 28 d

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

**Chemical Oxygen Demand:** 2.890 mg/g

**Hydrocarbons, C10, aromatics, <1% naphthalene**

**Biodegradability:** Material is inherently biodegradable (reaches > 20% biodegradation in OECD test(s) for inherent biodegradability).

**Polyethylene glycol mono(tristyrylphenyl)ether**

**Biodegradability:** No relevant data found.

**Benzenesulfonic acid, mono-C11-13-branched alkyl derivs., calcium salts**

**Biodegradability:** 10-day Window: Fail

**Biodegradation:** 2.9 %

**Exposure time:** 28 d

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

**N-Methyl-2-pyrrolidone**

**Biodegradability:** Material is readily biodegradable. Passes OECD test(s) for ready biodegradability.

10-day Window: Pass

**Biodegradation:** 91 %

**Exposure time:** 28 d

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

10-day Window: Not applicable

**Biodegradation:** 73 %

**Exposure time:** 28 d

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

10-day Window: Not applicable

**Biodegradation:** > 90 %

**Exposure time:** 8 d

**Method:** OECD Test Guideline 302B or Equivalent

**Theoretical Oxygen Demand:** 2.58 mg/mg

**Photodegradation**

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

**Sensitizer:** OH radicals

**Atmospheric half-life:** 0.486 d

**Method:** Estimated.

**Bioaccumulative potential****Fluroxypyr 1-methylheptyl ester**

**Bioaccumulation:** Bioconcentration potential is low (BCF < 100 or Log Pow < 3).

**Partition coefficient: n-octanol/water (log Pow):** 5.04 Measured

**Bioconcentration factor (BCF):** 26 Oncorhynchus mykiss (rainbow trout) Measured

**Halauxifen-methyl**

**Bioaccumulation:** Bioconcentration potential is moderate (BCF between 100 and 3000 or Log Pow between 3 and 5).

**Partition coefficient: n-octanol/water (log Pow):** 3.76

**Bioconcentration factor (BCF):** 233 Lepomis macrochirus (Bluegill sunfish) 42 d

**Cloquintocet-mexyl**

**Bioaccumulation:** Bioconcentration potential is moderate (BCF between 100 and 3000 or Log Pow between 3 and 5).

**Partition coefficient: n-octanol/water (log Pow):** 5.3 Estimated.

**Bioconcentration factor (BCF):** 122 - 621 Fish

**Reaction mass of N,N-dimethyldecan-1-amide and N,N-dimethyloctanamide**

**Bioaccumulation:** Bioconcentration potential is moderate (BCF between 100 and 3000 or Log Pow between 3 and 5).

**Partition coefficient: n-octanol/water (log Pow):** <3.44 at 20 °C

**Hydrocarbons, C10, aromatics, <1% naphthalene**

**Bioaccumulation:** No data available for this product. For similar material(s): Bioconcentration potential is high (BCF > 3000 or Log Pow between 5 and 7).

**Polyethylene glycol mono(tristyrylphenyl)ether**

**Bioaccumulation:** No relevant data found.

**Benzenesulfonic acid, mono-C11-13-branched alkyl derivs., calcium salts**

**Bioaccumulation:** Bioconcentration potential is moderate (BCF between 100 and 3000 or Log Pow between 3 and 5).

**Partition coefficient: n-octanol/water (log Pow):** 4.6 OECD Test Guideline 107 or Equivalent

**N-Methyl-2-pyrrolidone**

**Bioaccumulation:** Bioconcentration potential is low (BCF < 100 or Log Pow < 3).

**Partition coefficient: n-octanol/water (log Pow):** -0.38 Measured

**Mobility in Soil****Fluroxypyr 1-methylheptyl ester**

Expected to be relatively immobile in soil (Koc > 5000).

**Partition coefficient (Koc):** 6200 - 43000

**Halauxifen-methyl**

Expected to be relatively immobile in soil (Koc > 5000).

**Partition coefficient (Koc):** 5684

**Cloquintocet-mexyl**

Expected to be relatively immobile in soil (Koc > 5000).

**Partition coefficient (Koc):** 38070 Estimated.

**Reaction mass of N,N-dimethyldecan-1-amide and N,N-dimethyloctanamide**

Potential for mobility in soil is low (Koc between 500 and 2000).

**Partition coefficient (Koc):** 527.3

**Hydrocarbons, C10, aromatics, <1% naphthalene**

No relevant data found.

**Polyethylene glycol mono(tristyrylphenyl)ether**

No relevant data found.

**Benzenesulfonic acid, mono-C11-13-branched alkyl derivs., calcium salts**

No relevant data found.

**N-Methyl-2-pyrrolidone**

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

Given its very low Henry's constant, volatilization from natural bodies of water or moist soil is not expected to be an important fate process.

**Partition coefficient (Koc):** 21 Estimated.

**Results of PBT and vPvB assessment**

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

**Other adverse effects**

**Fluroxypyr 1-methylheptyl ester**

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

**Halauxifen-methyl**

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

**Cloquintocet-mexyl**

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

**Reaction mass of N,N-dimethyldecan-1-amide and N,N-dimethyloctanamide**

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

**Hydrocarbons, C10, aromatics, <1% naphthalene**

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

**Polyethylene glycol mono(tristyrylphenyl)ether**

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

**Benzenesulfonic acid, mono-C11-13-branched alkyl derivs., calcium salts**

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

**N-Methyl-2-pyrrolidone**

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.(Fluroxypyr 1-methylheptyl ester)
<b>UN number</b>	UN 3082
<b>Class</b>	9
<b>Packing group</b>	III
<b>Marine pollutant</b>	Fluroxypyr 1-methylheptyl ester

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

<b>Proper shipping name</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.(Fluroxypyr 1-methylheptyl ester)
<b>UN number</b>	UN 3082
<b>Class</b>	9
<b>Packing group</b>	III
<b>Marine pollutant</b>	Fluroxypyr 1-methylheptyl ester
<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.(Fluroxypyr 1-methylheptyl ester)
<b>UN number</b>	UN 3082
<b>Class</b>	9
<b>Packing group</b>	III

**Hazchem Code:** ●2X

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:** S5

**APVMA Approval Number:** 82839

### 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

Identification Number: 99072258 / A143 / Issue Date: 08.12.2017 / Version: 1.1

DAS Code: GF-2688

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

### Legend

ACGIH BEI	ACGIH - Biological Exposure Indices (BEI)
AU OEL	Australia. Workplace Exposure Standards for Airborne Contaminants.
Dow IHG	Dow Industrial Hygiene Guideline
SKIN	Absorbed via skin
STEL	Exposure standard - short term exposure limit
TWA	Exposure standard 8hr - time weighted average
US WEEL	USA. Workplace Environmental Exposure Levels (WEEL)

DOW AGROSCIENCES AUSTRALIA LIMITED urges each customer or recipient of this (M)SDS to study it carefully and consult appropriate expertise, as necessary or appropriate, to become aware of and understand the data contained in this (M)SDS and any hazards associated with the product. The information herein is provided in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ between various locations. It is the buyer's/user's responsibility to ensure that his activities comply with all federal, state, provincial or local laws. The information presented here pertains only to the product as shipped. Since conditions for use of the product are not under the control of the manufacturer, it is the buyer's/user's duty to determine the conditions necessary for the safe use of this product. Due to the proliferation of sources for information such as manufacturer-specific (M)SDSs, we are not and cannot be responsible for (M)SDSs obtained from any source other than ourselves. If you have obtained an (M)SDS from another source or if you are not sure that the (M)SDS you have is current, please contact us for the most current version.