

1. IDENTIFICATION

Product Identifier

KELPIE® P-QUAT ADVANCE HERBICIDE

Recommended Use of the Chemical and Restrictions on Use

Agricultural herbicide for use as described on the product label.

Details of Manufacturer or Importer

SINOCHEM INTERNATIONAL AUSTRALIA PTY LTD

ABN: 74 160 164 616

Level 8 / 606 St Kilda Road

Melbourne, Victoria, 3004

Australia

Tel: +61 3 9520 8888

Emergency Telephone:

Australia: 1800 033 111

2. HAZARDS IDENTIFICATION

Classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for Transport by Road and Rail; DANGEROUS GOODS.

This material is hazardous according to Safe Work Australia; HAZARDOUS CHEMICAL.

Classification of the chemical:

Acute Oral Toxicity - Category 3

Acute Dermal Toxicity - Category 3

Acute Inhalation Toxicity - Category 1

Skin Irritation - Category 2

Eye Irritation - Category 2A

Specific target organ toxicity (single exposure) - Category 3

Specific target organ toxicity (repeated exposure) - Category 1

The following health/environmental hazard categories fall outside the scope of the Workplace Health and Safety Regulations:

Acute Aquatic Toxicity - Category 2

Chronic Aquatic Toxicity - Category 2

SIGNAL WORD: DANGER



Hazard Statement(s):

H301+H311 Toxic if swallowed or in contact with skin.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H330 Fatal if inhaled.
H335 May cause respiratory irritation.
H372 Causes damage to organs through prolonged or repeated exposure.

Precautionary Statement(s):**Prevention:**

P102 Keep out of reach of children.
P103 Read label before use.
P260 Do not breathe mist, vapours, spray.
P264 Wash hands thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves / protective clothing / eye protection / face protection.
P284 Wear respiratory protection.

Response:

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P330 Rinse mouth.
P302+P352 IF ON SKIN: Wash with plenty of soap and water.
P321 Specific treatment (see First Aid Measures on Safety Data Sheet).
P322 Specific measures (see First Aid Measures on Safety Data Sheet).
P361 Take off immediately all contaminated clothing.
P362 Take off contaminated clothing and wash before reuse.
P363 Wash contaminated clothing before re-use.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313 If eye irritation persists: Get medical advice/attention.
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P312 Call a POISON CENTER or doctor/physician if you feel unwell.
P320 Specific treatment is urgent (see First Aid Measures on this Safety Data Sheet).
P314 Get medical advice/attention if you feel unwell.

Storage:

P403+P233 Store in a well-ventilated place. Keep container tightly closed.
P405 Store locked up.

Disposal:

P501 Dispose of contents and container in accordance with local, regional, national, international regulations.

Poisons Schedule (SUSMP): S7 Dangerous Poison.

3. COMPOSITION AND INFORMATION ON INGREDIENTS

Product Description: Aqueous concentrate containing paraquat dichloride and amitrole.

Components	CAS Number	Proportion	Hazard Codes
Paraquat (present as paraquat dichloride)	1910-42-5	250 g/L	H330 H311 H301 H372 H319 H335 H315 H400 H410
Amitrole	61-82-5	10 g/L	H361d H373 H411
Other non-hazardous components	-	to 100%	-

4. FIRST-AID MEASURES

For advice, contact a Poisons Information Centre (e.g. phone Australia 131 126; New Zealand 0800 764 766) or a doctor.

Inhalation:

Remove victim from area of exposure - avoid becoming a casualty. Remove contaminated clothing and loosen remaining clothing. Allow patient to assume most comfortable position and keep warm. Keep at rest until fully recovered. If patient finds breathing difficult and develops a bluish discolouration of the skin (which suggests a lack of oxygen in the blood - cyanosis), ensure airways are clear of any obstruction and have a qualified person give oxygen through a face mask. Apply artificial respiration if patient is not breathing. Seek immediate medical advice.

Skin Contact:

If skin or hair contact occurs, immediately remove any contaminated clothing and wash skin and hair thoroughly with running water and soap. If swelling, redness, blistering or irritation occurs seek medical assistance.

Eye Contact:

If in eyes, hold eyelids apart and flush the eye continuously with running water. Continue flushing until advised to stop by a Poisons Information Centre or a doctor, or for at least 15 minutes.

Ingestion:

Immediately rinse mouth with water. If swallowed, do NOT induce vomiting. Never give anything by the mouth to an unconscious patient. Seek immediate medical assistance.

Indication of immediate medical attention and special treatment needed:

Rapid treatment is essential. Refer to 'The Treatment of Paraquat Poisoning: A Guide to Doctors' (2003 or later edition) - available at most major treatment hospitals and Poison Information Centres.

TREATMENT: Wash out stomach and test urine and gastric aspirate (if clear) for presence of paraquat. Give up to 1 litre of 15% aqueous suspension of Fuller's Earth orally or via gastric tube, together with a suitable purgative (200 mL of an aqueous solution of mannitol).

Repeat administration of absorbent plus purgative until absorbent is seen in the stools. This should normally take between 4 and 6 hours after the start of treatment.

Do not use supplemental oxygen.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media:

Not combustible, however, if material is involved in a fire use: Fine water spray, normal foam, dry agent (carbon dioxide, dry chemical powder).

Hazchem or Emergency Action Code: 2X

Specific hazards arising from the chemical:

Non-combustible material. Environmentally hazardous.

Special protective equipment and precautions for fire-fighters:

Decomposes on heating emitting toxic fumes. Fire fighters to wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to products of decomposition.

6. ACCIDENTAL RELEASE MEASURES

Emergency procedures/Environmental precautions:

Isolate spill or leak area immediately. Clear area of all unprotected personnel. Do not allow container or product to get into drains, sewers, streams or ponds. If contamination of sewers or waterways has occurred advise local emergency services.

Personal precautions/Protective equipment/Methods and materials for containment and cleaning up:

Rapid decontamination of paraquat is essential. Crystalline material from dried concentrate may become suspended in air causing irritation and nosebleeds. Wear protective equipment to prevent skin and eye contact and breathing in mists or dusts. Contain - prevent runoff into drains and waterways. Use absorbent (soil, sand or other inert material). Collect and seal in properly labelled drums for disposal. Sweep the area. If the area is still damp, repeat procedure. If contamination of crops, sewers or waterways has occurred advise emergency services. Remove and wash all protective clothing and equipment. Change contaminated clothing immediately and wash as soon as possible. Shower, using large amounts of soap and water on completion of the mopping up operations.

7. HANDLING AND STORAGE

This material is a Scheduled Poison S7 and must be stored, maintained and used in accordance with the relevant regulations.

Precautions for safe handling:

Avoid skin and eye contact and breathing in vapour, mists and aerosols. Thoroughly clean equipment after use. Keep out of reach of children. When using do not eat, drink or smoke. Wash hands thoroughly after handling. Launder contaminated clothing before reuse.

Conditions for safe storage, including any incompatibilities:

For use by licensed pest-control operators or primary producers only. Store in the closed, original container in a dry, cool, well-ventilated locked room or place away from children, animals, food, feedstuffs, seed and fertilisers. Do not store for prolonged periods in direct sunlight. Do not put into drink containers. Store away from incompatible materials described in Section 10. Keep containers closed when not in use - check regularly for leaks.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Control Parameters: No value assigned for this specific material by Safe Work Australia. However, Workplace Exposure Standard(s) for constituent(s):

Paraquat (respirable sizes): 8hr TWA = 0.1 mg/m³

Amitrole: 8hr TWA = 0.2 mg/m³

As published by Safe Work Australia Workplace Exposure Standards for Airborne Contaminants.

TWA - The time-weighted average airborne concentration of a particular substance when calculated over an eight-hour working day, for a five-day working week.

These Workplace Exposure Standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept to as low a level as is workable. These workplace exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.

Appropriate engineering controls:

Ensure ventilation is adequate and that air concentrations of components are controlled below quoted Workplace Exposure Standards. Keep containers closed when not in use.

If in the handling and application of this material, safe exposure levels could be exceeded, the use of engineering controls such as local exhaust ventilation must be considered and the results documented. If achieving safe exposure levels does not require engineering controls, then a detailed and documented risk assessment using the relevant Personal Protective Equipment (PPE) (refer to PPE section below) as a basis must be carried out to determine the minimum PPE requirements.

Individual protection measures, such as Personal Protective Equipment (PPE):

The selection of PPE is dependent on a detailed risk assessment. The risk assessment should consider the work situation, the physical form of the chemical, the handling methods, and environmental factors.

OVERALLS, SAFETY SHOES, CHEMICAL GOGGLES, GLOVES, RESPIRATOR.



Wear overalls, chemical goggles and impervious gloves. Use with adequate ventilation. If determined by a risk assessment an inhalation risk exists, wear an organic vapour/particulate respirator or an air supplied mask meeting the requirements of AS/NZS 1715 and AS/NZS 1716. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Clear Liquid
Colour: Blue

Odour:	Unpleasant
Odour Threshold:	Not available
Solubility:	Miscible in water.
Specific Gravity:	ca. 1.07-1.10
Relative Vapour Density (air=1):	Not available
Vapour Pressure (20 °C):	2.37 kPa (water vapour pressure)
Flash Point (°C):	Not applicable
Flammability Limits (%):	Not available
Autoignition Temperature (°C):	Not available
Boiling Point/Range (°C):	ca. 100 at 100kPa
pH:	5.5
Freezing Point/Range (°C):	ca. 0

10. STABILITY AND REACTIVITY

Reactivity:	Paraquat is corrosive to most metals.
Chemical stability:	Stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.
Possibility of hazardous reactions:	None known.
Conditions to avoid:	Avoid temperatures above 30 °C. Avoid exposure to heat, sources of ignition, and open flame. Avoid exposure to direct sunlight.
Incompatible materials:	Incompatible with strong oxidising agents, strong acids, strong bases.
Hazardous decomposition products:	Oxides of carbon. Oxides of nitrogen. Hydrogen cyanide. Hydrogen chloride.

11. TOXICOLOGICAL INFORMATION

No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label. Symptoms or effects that may arise if the product is mishandled and overexposure occurs are:

Ingestion:	<p>PARAQUAT CAN KILL IF SWALLOWED. Rapid treatment is essential. The immediate effects of poisoning depend on the dose of paraquat absorbed into the blood.</p> <p>Mild poisoning occurs at <20 mg paraquat ion/kg body weight and the effects are vomiting and diarrhoea.</p> <p>Moderate to severe poisoning occurs at 20-30 mg paraquat ion/kg body weight and the effects are vomiting, abdominal discomfort, soreness and inflammation of the mouth, throat and oesophagus, difficulty in swallowing and later, diarrhoea. Kidney and liver damage may appear 1-3 days after exposure. Can cause death by delayed proliferating fibrosis of the lung within 1-3 weeks.</p> <p>Lethal poisoning occurs at >30 mg paraquat ion/kg body weight and the effects are nausea and vomiting, and can cause death by multi-organ failure and circulatory collapse within 48 hours.</p>
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Eye contact:	An eye irritant.
Skin contact:	Contact with skin will result in irritation. Contamination of the nails may cause white spots or in severe cases cracking and loss of the nail. Normal growth follows without delay. Intact skin is a very effective barrier to paraquat. Damaged skin removes the barrier and paraquat may be absorbed with effects as outlined above under 'INGESTION'.
Inhalation:	Highly toxic if inhaled. However, unlikely to be hazardous by inhalation because of low vapour pressure of the material at ambient temperature. Nose bleeding and soreness of the throat may result from spray mist or dust trapped on the nasal mucosa. Irritating to the respiratory system. Pulmonary oedema may occur up to 48 hours after exposure and could prove fatal. This product contains a stenching agent which may cause headaches and nausea in some people when inhaled. The presence of this offensive smell in the air does not necessarily indicate the presence of paraquat.
Acute toxicity:	No LD50 data available for the product. However, for Paraquat dichloride :
Oral LD50 (rat):	57 mg/kg
Dermal LD50 (rat):	80 mg/kg
Inhalation LC50 (rat):	1 mg/m ³ /6hr
Chronic effects:	
Mutagenicity:	No information available.
Carcinogenicity:	No information available.
Reproductive toxicity:	No information available.
Specific Target Organ Toxicity (STOT) - single exposure:	May cause respiratory irritation.
Specific Target Organ Toxicity (STOT) - repeated exposure:	Causes damage to organs through prolonged or repeated exposure.
Aspiration hazard:	No information available.

12. ECOLOGICAL INFORMATION

Ecotoxicity	Avoid contaminating waterways.
Persistence/degradability:	No information available.
Bioaccumulative potential:	No information available.
Mobility in soil:	No information available.
Aquatic toxicity:	Toxic to aquatic organisms. May cause long lasting harmful effects to aquatic life.
96hr LC50 (rainbow trout):	32 mg/L
96hr LC50 (fish):	2.15-13 mg/L (brown trout)

13. DISPOSAL CONSIDERATIONS

Disposal methods:

Triple or preferably pressure rinse containers before disposal. Add rinsings to spray tank. Do not dispose of undiluted chemicals on-site. If recycling, replace cap and return clean containers to recycler or designated collection point. If not recycling, break, crush or puncture and bury empty containers in a local authority landfill. If no landfill is available, bury the containers below 500 mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots. Empty containers and product should not be burnt.

14. TRANSPORT INFORMATION

Road and Rail Transport

Classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for Transport by Road and Rail; DANGEROUS GOODS.



UN No: 3016
Transport Hazard Class: 6.1 Toxic
Packing Group: III
Proper Shipping Name or Technical Name: BIPYRIDILIUM PESTICIDE, LIQUID, TOXIC (CONTAINS PARAQUAT)
Hazchem or Emergency Action Code: 2X

Marine Transport

Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea; DANGEROUS GOODS.

UN No: 3016
Transport Hazard Class: 6.1 Toxic
Packing Group: III
Proper Shipping Name or Technical Name: BIPYRIDILIUM PESTICIDE, LIQUID, TOXIC (CONTAINS PARAQUAT)

IMDG EMS Fire: F-A
IMDG EMS Spill: S-A

Air Transport

Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air; DANGEROUS GOODS.

UN No: 3016
Transport Hazard Class: 6.1 Toxic
Packing Group: III

Proper Shipping Name or Technical Name: BIPYRIDILIUM PESTICIDE, LIQUID, TOXIC (CONTAINS PARAQUAT)

15. REGULATORY INFORMATION

Classification:

This material is hazardous according to Safe Work Australia; HAZARDOUS CHEMICAL.

Classification of the chemical:

Acute Oral Toxicity - Category 3

Acute Dermal Toxicity - Category 3

Acute Inhalation Toxicity - Category 1

Skin Irritation - Category 2

Eye Irritation - Category 2A

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The following health/environmental hazard categories fall outside the scope of the Workplace Health and Safety Regulations:

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Chronic Aquatic Toxicity - Category 2

Hazard Statement(s):

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H315 Causes skin irritation.

H319 Causes serious eye irritation.

H330 Fatal if inhaled.

H335 May cause respiratory irritation.

H372 Causes damage to organs through prolonged or repeated exposure.

Poisons Schedule (SUSMP): S7 Dangerous Poison.

All the constituents of this material are listed on the Australian Inventory of Chemical Substances (AICS) or are Australian Pesticides & Veterinary Medicines Authority (APVMA) approved active constituents.

This product is approved by the Australian Pesticides and Veterinary Medicines Authority (APVMA).
APVMA Approval Number: 83076.

16. OTHER INFORMATION

References:

Supplier Safety Data Sheet; 01/ 2019.

'Registry of Toxic Effects of Chemical Substances'. Ed. D. Sweet, US Dept. of Health & Human Services: Cincinnati, 2018.

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This safety data sheet has been prepared by Ixom Operations Pty Ltd (Toxicology & SDS Services).

Reason(s) for Issue:

First Issue Primary SDS

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