

Safety Data Sheet

according to WHS Regulations

Print date: 24.07.2023

Revision date: 24.07.2023

1 Identification

Product Name: eChem Paraquat 360 Herbicide

Other Means of Identification: Mixture

APVMA Approval Number: 93444

Recommended Use of the Chemical and Restriction on Use: Agricultural herbicide

Details of Manufacturer or Importer:

eChem Australia Pty Ltd
Level 4, Lantos Place
80 Stamford Road
Indooroopilly QLD 4068
Australia

Phone Number: 1300 781 649 (office hours)

Emergency telephone number: 1800 033 111 (any time) or National Poisons Information Centre: 13 11 26

2 Hazard(s) Identification

Hazardous Nature:

Classified as Hazardous according to the Globally Harmonised System of Classification and Labelling of Chemicals (GHS) and Safe Work Australia criteria.

Classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail (7th edition).



Skull and crossbones

Acute Toxicity (Dermal) 3 H311 Toxic in contact with skin.

Acute Toxicity (Inhalation) 3 H331 Toxic if inhaled.



Health hazard

STOT RE 1

H372 Causes damage to organs through prolonged or repeated exposure.



Corrosion

Eye Damage 1

H318 Causes serious eye damage.



Environment

Aquatic Chronic 1

H410 Very toxic to aquatic life with long lasting effects.



Acute Toxicity (Oral) 4

H302 Harmful if swallowed.

Skin Corrosion/Irritation 2

H315 Causes skin irritation.

STOT SE 3

H335 May cause respiratory irritation.

Aquatic Acute 2

H401 Toxic to aquatic life.

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Signal Word Danger**Hazard Statements**

H302 Harmful if swallowed.
 H311 Toxic in contact with skin.
 H331 Toxic if inhaled.
 H315 Causes skin irritation.
 H318 Causes serious eye damage.
 H335 May cause respiratory irritation.
 H372 Causes damage to organs through prolonged or repeated exposure.
 H401 Toxic to aquatic life.
 H410 Very toxic to aquatic life with long lasting effects.

Precautionary Statements

P260 Do not breathe dust/fume/gas/mist/vapours/spray.
 P264 Wash thoroughly after handling.
 P270 Do not eat, drink or smoke when using this product.
 P271 Use only outdoors or in a well-ventilated area.
 P273 Avoid release to the environment.
 P280 Wear protective gloves/protective clothing/eye protection/face protection.
 P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
 P302+P352 IF ON SKIN: Wash with plenty of water.
 P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P310 Immediately call a POISON CENTER/doctor.
 P321 Specific treatment (see on this label).
 P314 Get medical advice/attention if you feel unwell.
 P330 Rinse mouth.
 P361+P364 Take off immediately all contaminated clothing and wash it before reuse.
 P332+P313 If skin irritation occurs: Get medical advice/attention.
 P391 Collect spillage.
 P403+P233 Store in a well-ventilated place. Keep container tightly closed.
 P405 Store locked up.
 P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

3 Composition and Information on Ingredients

Chemical Characterization: Mixtures**Description:** Mixture of substances listed below with nonhazardous additions.

Hazardous Components:		
CAS: 1910-42-5	Paraquat (present as paraquat dichloride) ⚠ Acute Toxicity (Oral) 3, H301; Acute Toxicity (Dermal) 3, H311; Acute Toxicity (Inhalation) 2, H330; ⚠ STOT RE 1, H372; ⚠ Aquatic Chronic 1, H410; ⚠ Skin Corrosion/Irritation 2, H315; Eye Irritation 2A, H319; STOT SE 3, H335	30-45%
CAS: 26635-93-8	Ethoxylated oleylamine ⚠ Eye Damage 1, H318; ⚠ Aquatic Acute 1, H400; ⚠ Acute Toxicity (Oral) 4, H302; Skin Corrosion/Irritation 2, H315	5-10%
CAS: 110-86-1	Pyridine ⚠ Flammable Liquids 2, H225; ⚠ STOT RE 2, H373; ⚠ Skin Corrosion/Irritation 1C, H314; ⚠ Acute Toxicity (Oral) 4, H302; Acute Toxicity (Dermal) 4, H312; Acute Toxicity (Inhalation) 4, H332	<0.5%
Non Hazardous Components:		
CAS: 3844-45-9	C.I. Food Blue 2	<0.1%

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CAS: 27277-00-5 2-Amino-6-methyl-4-propyl-4H-[1,2,4]triazolo[1,5-a]pyrimidin-5-one <0.1%

4 First Aid Measures

Inhalation:

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek medical attention if breathing problems develop.

Skin Contact:

In case of skin contact, immediately remove contaminated clothing and wash affected areas with water and soap. Seek medical attention if irritation persists.

Eye Contact:

In case of eye contact, rinse with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing for at least 15 minutes. Seek immediate medical attention.

Ingestion:

If swallowed, do not induce vomiting. Immediately rinse mouth with water. Give a glass of water to drink in small sips. Never give anything by mouth to an unconscious person. Seek immediate medical attention.

Symptoms Caused by Exposure:

Inhalation: Toxic if inhaled. May cause respiratory irritation.

Skin Contact: Toxic in contact with skin. Causes skin irritation.

Eye Contact: Causes serious eye damage.

Ingestion: Harmful if swallowed. May cause gastrointestinal irritation, nausea, diarrhoea and vomiting.

5 Fire Fighting Measures

Suitable Extinguishing Media:

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Do not use a solid water stream.

Specific Hazards Arising from the Chemical:

Hazardous combustion products include oxides of carbon, oxides of nitrogen, chlorine compounds and unidentified, potentially toxic fumes.

Product is not flammable.

Containers close to fire should be removed only if safe to do so. Use water spray to cool fire exposed containers.

Prevent run-off from fire fighting entering drains or water courses.

HAZCHEM Code: 2X

Special Protective Equipment and Precautions for Fire Fighters:

When fighting a major fire wear self-contained breathing apparatus and protective equipment.

6 Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures:

Wear approved respiratory protection, chemical resistant gloves, protective clothing and safety boots.

Evacuate all non-essential personnel from affected area. Do not breathe vapours. Ensure adequate ventilation.

Environmental Precautions:

In the event of a major spill, prevent spillage from entering drains or water courses.

Inform respective authorities in case of seepage into water course or sewage system.

Methods and Materials for Containment and Cleaning Up:

Stop leak if safe to do so and absorb spill with sand, earth, vermiculite or some other absorbent material.

Collect the spilled material and place into a suitable container for disposal.

7 Handling and Storage

Precautions for Safe Handling:

Use of safe work practices are recommended to avoid eye or skin contact and inhalation of vapours or spray mists. Use only outdoors or in a well-ventilated area.

Food, beverages and tobacco products should not be stored or consumed where this material is in use. Always

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wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use. Provide eyewash fountains and safety showers in close proximity to points of potential exposure.

Conditions for Safe Storage:

Store in a cool, dry and well ventilated area. Keep container tightly closed when not in use. Protect from freezing. Protect from direct sunlight, heat, sparks, open flames and other sources of ignition. Keep away from strong oxidising agents, strong acids and strong bases.

8 Exposure Controls and Personal Protection

Exposure Standards:**CAS: 4685-14-7 Paraquat**WES | TWA: 0.1 mg/m³**Engineering Controls:**

Ensure adequate ventilation of the working area, keeping airborne concentrations below occupational exposure standards.

Respiratory Protection:

Use an approved mixed type organic vapour / particulate respirator (types A and P) under conditions where exposure to the substance is apparent (e.g. generation of high concentrations of mist or vapour, inadequate ventilation, development of respiratory tract irritation) and engineering controls are not feasible. See Australian Standards AS/NZS 1715 and 1716 for more information.

Skin Protection:

Protective, elbow-length gloves. See Australian/New Zealand Standard AS/NZS 2161 for more information. When selecting gloves for use against certain chemicals, the degradation resistance, permeation rate and permeation breakthrough time should be considered. Occupational protective clothing (depending on conditions in which it has to be used, in particular as regards the period for which it is worn, which shall be determined on the basis of the seriousness of the risk, the frequency of exposure to the risk, the characteristics of the workstation of each worker and the performance of the protective clothing). See Australian/New Zealand Standard AS/NZS 4501 for more information.

Eye and Face Protection:

Safety glasses with top and side shields or goggles. See Australian/New Zealand Standards AS/NZS 1336 and 1337 for more information.

9 Physical and Chemical Properties

Appearance:

Form:	Liquid
Colour:	Blue
Odour:	Unpleasant
Odour Threshold:	No information available
pH-Value:	approx. 5
Melting point/freezing point:	No information available
Initial Boiling Point/Boiling Range:	No information available
Flash Point:	No information available
Flammability (solid, gas):	Not applicable
Auto-ignition Temperature:	No information available
Decomposition Temperature:	No information available
Explosion Limits:	
Lower:	No information available
Upper:	No information available
Vapour Pressure:	No information available
Relative Density:	1.136
Vapour Density:	No information available
Evaporation Rate:	No information available

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Solubility in Water: Forms an emulsion in water
Partition Coefficient (n-octanol/water): No information available

10 Stability and Reactivity

Possibility of Hazardous Reactions: No dangerous reactions known under conditions of normal use.

Chemical Stability: Stable at ambient temperature and under normal conditions of storage and use.

Conditions to Avoid:

Protect from freezing. Protect from direct sunlight, heat, sparks, open flames and other sources of ignition.

Incompatible Materials: Strong oxidising agents, strong acids and strong bases.

Hazardous Decomposition Products:

Oxides of carbon, oxides of nitrogen, chlorine compounds and unidentified, potentially toxic fumes.

11 Toxicological Information

Toxicity:

LD50/LC50 Values:

CAS: 1910-42-5 Paraquat (present as paraquat dichloride)

Oral	LD50	283-344 mg/kg (Rattus norvegicus (rat))
Inhalation	LC50/4 h	0.8-1.9 mg/l (Rattus norvegicus (rat))

Acute Health Effects

Inhalation: Toxic if inhaled. May cause respiratory irritation.

Skin: Toxic in contact with skin. Causes skin irritation.

Eye: Causes serious eye damage.

Ingestion: Harmful if swallowed. May cause gastrointestinal irritation, nausea, diarrhoea and vomiting.

Skin Corrosion / Irritation: Causes skin irritation.

Serious Eye Damage / Irritation: Causes serious eye damage.

Respiratory or Skin Sensitisation: Based on classification principles, the classification criteria are not met.

Germ Cell Mutagenicity: Based on classification principles, the classification criteria are not met.

Carcinogenicity: Based on classification principles, the classification criteria are not met.

Reproductive Toxicity: Based on classification principles, the classification criteria are not met.

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: Based on classification principles, the classification criteria are not met.

Chronic Health Effects: No information available

Existing Conditions Aggravated by Exposure: No information available

Additional toxicological information:

The Australian Acceptable Daily Intake (ADI) for paraquat (as cation) for a human is 0.004 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOAEL of 0.45 mg/kg/day, the level determined to show no effects during long term exposure for the most sensitive indicators and the most sensitive species. (Ref: Australian Pesticides and Veterinary Medicines Authority, 'Acceptable Daily Intakes for Agricultural and Veterinary Chemicals', 2023).

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12 Ecological Information

Ecotoxicity:**CAS: 1910-42-5 Paraquat (present as paraquat dichloride)**

LD50	981 mg/kg (Colinus virginianus (bobwhite quail))
	970 mg/kg (Coturnix coturnix (common quail))

Aquatic toxicity:

Very toxic to aquatic life with long lasting effects.

CAS: 1910-42-5 Paraquat (present as paraquat dichloride)

EC50/48 h	6.1 mg/l (Daphnia magna (water flea))
EC50/72 h	0.00103 mg/l (Bacillariophyceae (diatom))
	0.6 mg/l (Pseudokirchneriella subcapitata (algae))
LC50/96 h	55 mg/l (Oncorhynchus mykiss (rainbow trout))

Persistence and Degradability: No data available on finished product.**Bioaccumulative Potential:** No data available on finished product.**Mobility in Soil:** Active ingredient (paraquat) will adsorb to soil particles. Once in soil, low mobility is expected.**Other adverse effects:** No further relevant information available.

13 Disposal Considerations

Disposal Methods and Containers: Dispose according to applicable local and state government regulations.**Special Precautions for Landfill or Incineration:**

Please consult your state Land Waste Management Authority for more information.

14 Transport Information

UN Number**ADG, IMDG, IATA** UN3016**Proper Shipping Name****ADG** BIPYRIDILIUM PESTICIDE, LIQUID, TOXIC (Paraquat dichloride), ENVIRONMENTALLY HAZARDOUS**IMDG, IATA** BIPYRIDILIUM PESTICIDE, LIQUID, TOXIC (Paraquat dichloride)**Dangerous Goods Class****ADG Class:** 6.1**Packing Group:****ADG, IMDG, IATA** III**EMS Number:**

F-A,S-A

Hazchem Code:

2X

Excepted quantities (EQ): E1**Limited Quantities:** 5L

15 Regulatory Information

Australian Inventory of Industrial Chemicals:

All components are on the inventory, or in compliance with the inventory.

Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Poison Schedule:

Poisons Schedule: 7

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Australian Pesticides and Veterinary Medicines Authority:

This product is registered with the Australian Pesticides and Veterinary Medicines Authority. APVMA approval number 93444.

16 Other Information

Date of Preparation or Last Revision: 24.07.2023**Prepared by:** MSDS.COM.AU Pty Ltdwww.msds.com.au**Abbreviations and acronyms:**

ADG: Australian Dangerous Goods

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

IARC: International Agency for Research on Cancer

STEL: Short Term Exposure Limit

TWA: Time Weighted Average

NES: National Exposure Standard (Safe Work Australia - Workplace Exposure Standards For Airborne Contaminants)

Flammable Liquids 2: Flammable liquids – Category 2

Acute Toxicity (Oral) 3: Acute toxicity – Category 3

Acute Toxicity (Oral) 4: Acute toxicity – Category 4

Acute Toxicity (Inhalation) 2: Acute toxicity – Category 2

Skin Corrosion/Irritation 1C: Skin corrosion/irritation – Category 1C

Skin Corrosion/Irritation 2: Skin corrosion/irritation – Category 2

Eye Damage 1: Serious eye damage/eye irritation – Category 1

Eye Irritation 2A: Serious eye damage/eye irritation – Category 2A

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

STOT RE 1: Specific target organ toxicity (repeated exposure) – Category 1

STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2

Aquatic Acute 1: Hazardous to the aquatic environment, short-term (Acute). Category 1

Aquatic Acute 2: Hazardous to the aquatic environment, short-term (Acute). Category 2

Aquatic Chronic 1: Hazardous to the aquatic environment, long-term (Chronic). Category 1

Disclaimer

This SDS is prepared in accord with the Safe Work Australia document “Code of Practice for the Preparation of Safety Data Sheets for Hazardous Chemicals - July 2020”.

The information contained in this safety data sheet is provided in good faith and is believed to be accurate at the date of issuance. eChem Australia Pty Ltd makes no representation of the accuracy or comprehensiveness of the information and to the full extent allowed by law excludes all liability for any loss or damage related to the supply or use of the information in this material safety data sheet. MSDS.COM.AU Pty Ltd is not in a position to warrant the accuracy of the data herein. The user is cautioned to make their own determinations as to the suitability of the information provided to the particular circumstances in which the product is used.