

CLAYTON

PLANT PROTECTION

CLAYTON PARADIGM

SAFETY DATA SHEET

1. IDENTIFICATION OF SUBSTANCE

Clayton Paradigm MAPP 12001
For use only as an agricultural/horticultural/forestry herbicide.

Marketing company

Clayton Plant Protection (UK) Ltd.,
Unit F10, Bracetown Business Park, Clonee, Co. Meath, Ireland.
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2. COMPOSITION/INFORMATION ON INGREDIENTS

Paraquat dichloride	166 g/l	CA 1910-42-5	T+, N	R 24/25, 26, 36/37/38, 48/25, 50/53
Diquat dibromide	150 g/l	CA 85-00-7	T+, T, Xn, Xi, N	R22, 26, 48/25, 36/37/38, 43, 50/53
Pyridine bases	10 g/l	CA 68391-11-7	Xn	R 10, 20/21/22
Emetic	<1 g/l	CA 27277-00-5	T	R 25
Sodium dodecyl benzenesulphonate	<500 g/l	CA 85117-50-6	Xi	R 36/38
Polyoxyethylene alkyl amine	<100 g/l	-	Xn	R 22, 38, 41

3. HAZARDS IDENTIFICATION

Human: Ingestion: toxic; danger of serious damage to health by prolonged exposure if swallowed
Skin: harmful; irritant
Eyes: severe irritant; risk of serious damage
Inhalation: irritant

Environmental: very toxic to aquatic organisms, may cause adverse long-term effects in the aquatic environment

Other: corrosive to many metals

4. FIRST AID

Eyes: flush immediately with plenty of water for 15 minutes. Seek medical attention.

Skin: remove all contaminated clothing. Wash exposed skin and hair immediately with water, then with soap and water. Seek medical advice.

Inhalation: remove to fresh air; start artificial respiration if not breathing. Seek medical attention immediately. Note: paraquat and diquat are non-volatile and therefore exposure via this route is unlikely during normal handling and use.

If swallowed: if conscious, induce vomiting if not already occurring; give 1-2 glasses of water to drink and induce further vomiting; seek medical attention **immediately** and show the container label or this datasheet. Do not induce vomiting or give anything by mouth if the patient is unconscious.

Guide to doctor: give stomach washout and test urine and gastric aspirate for paraquat. Purge gastro-intestinal tract immediately with a 15% suspension of Fuller's Earth and 200 ml of 20% mannitol in water. Do not give oxygen. Contact nearest Poisons Information Centre for advice on further treatment.

5. FIRE FIGHTING

Wear full protective clothing, goggles and respirator. Call fire brigade for all but small, immediately controllable fires. Product is not flammable, but packaging will burn. Do not breathe smoke. Toxic fumes may be released. Keep containers cool by spraying with water. Extinguish source of fire, preferably with dry inert powder, foam, carbon dioxide or water fog. Do not use a water jet. Contain fire-fighting water, bunding as necessary.

6. ACCIDENTAL RELEASE

Wear coverall, face protection, rubber boots and suitable protective gloves as appropriate to the situation. Keep unprotected persons and animals away. Prevent contamination of water. Inform local water plc immediately if product enters drains. Inform Environment Agency/Scottish Environment Protection Agency if product enters surface or ground waters. Absorb spillage with sand or other inert material. Collect up all contaminated material and place in covered, labelled containers for disposal. Do not flush with water.

7. HANDLING AND STORAGE

Keep away from food, drink and animal feeding stuffs.
Keep out of reach of children.
Keep in original container, tightly closed, in a safe place under lock and key.
Store in a cool, dry, place out of direct sunlight. Protect from frost.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Wear suitable protective clothing (coveralls), suitable protective gloves and face protection (faceshield) when handling the concentrate.
Wear suitable protective clothing (coveralls), suitable protective gloves, rubber boots and face protection (faceshield) during application and when handling contaminated surfaces.
When using, do not eat, drink or smoke.
Wash splashes from skin or eyes immediately.
In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
Do not breathe spray.
Take off immediately all contaminated clothing.
Wash all protective clothing thoroughly after use, especially the insides of gloves.
Wash hands and exposed skin before meals and after work.
In case of accident or if you feel unwell seek medical advice immediately (show the label where possible).

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	green-blue liquid concentrate
Odour:	pungent (pyridine bases)
Flash point:	not flammable
Relative density:	1.13 at 20°C
pH:	4-5
Water solubility:	fully soluble/miscible with water

10. STABILITY AND REACTIVITY

Stable in packaging and in air at ordinary temperatures. Keep in original packaging. Paraquat and diquat are corrosive to many common metals.

11. TOXICOLOGY

Acute oral LD ₅₀ for female rat:	522 mg/kg
Acute dermal LD ₅₀ for female rat:	866 mg/kg
Acute inhalation toxicity for rat:	Low; irritant; may cause nose bleeding
Skin sensitisation (guinea pig):	Not a skin sensitiser

12. ECOLOGICAL INFORMATION

In soil:	Rapidly and strongly bound
LC ₅₀ (96 hour) for rainbow trout:	Circa 230 mg/l
EC ₅₀ (48 hour) for daphnia:	Circa 17 mg/l

13. DISPOSAL

Product: dispose of via an authorised disposal contractor.
Containers: crush and bury or dispose of via an authorised disposal contractor. Consult also 'Pesticides: Code of Practice for the Safe Use of Pesticides on Farms and Holdings' (DEFRA/HSE).

14. ROAD AND RAIL TRANSPORT

CORROSIVE LIQUID, TOXIC, N.O.S. (contains paraquat dichloride and diquat dibromide).
UN 2922; Class 8 (corrosive); Subsidiary Class 6.1 (toxic substance); Packing group III
Packaging: 5-5.5 litres in high-density polyethylene containers

15. REGULATORY INFORMATION



TOXIC

contains 120 g/l paraquat dichloride and 80 g/l diquat dibromide

R48/25 Toxic: danger of serious damage to health by prolonged exposure if swallowed

R21/22 Harmful in contact with skin and if swallowed

R41 Risk of serious damage to eyes

R37/38 Irritating to respiratory system and skin



**N DANGEROUS
FOR THE
ENVIRONMENT**

R50/R53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

S1/2 Keep locked up and out of the reach of children.

S13 Keep away from food, drink and animal feedingstuffs.

S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S28 After contact with skin, wash immediately with plenty of water.

S45 In case of accident or if you feel unwell seek medical advice immediately (show the label where possible).

S46 If swallowed, seek medical advice immediately and show this container or label.

S35 This material and its container must be disposed of in a safe way.

Paraquat is subject to the provisions of the Poisons Act 1972*, the Poisons List Order 1982* and the Poisons Rules 1982*. It is scheduled as a Part II Poison.

* Available from The Stationery Office.

The Control of Substances Hazardous to Health (COSHH) Regulations may apply to the use of the product at work.

The product is approved under the Control of Pesticides Regulations 1986.

16. OTHER INFORMATION

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