

Safety Data Sheet

Revision date: 07-October-2003

replaces all previous editions

GRAMOXONE 100

1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND COMPANY OR UNDERTAKING

Identification of the Substance or Preparation

Tradename GRAMOXONE 100
 Design Code YF 7697 A / A-3879D
 AGI Code 1000185

Company Identification

Company Syngenta Crop Protection UK Ltd
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 Phone (01223) 833621
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 Emergency Phone **+44 (0) 1484 538444 (24h)**

2. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical characteristic

Formulation type An aqueous solution containing emetic, stench, surfactants and dye.
 Use A bipyridyl contact herbicide.

EC-No. : 217-615-7 Paraquat dichloride

EC-No. : 269-929-9 Pyridine Bases

EC-No. : 248-383-5 Paraquat Emetic (aminopropyltriazolopyrimidone)

CAS-No.	Hazardous ingredients	Concentration	Hazard symbols	Risk phrases (R)
1910-42-5	Paraquat dichloride (Classification according to Directive 67/548/EEC)	200 g/l as paraquat ion	T+, N	24/25, 26, 36/37/38, 48/25, 50/53
68391-11-7	Pyridine Bases	10 g/l	Xn	10, 20/21/22
27277-00-5	Paraquat Emetic (aminopropyltriazolopyrimidone)	< 10 g/l	T	25
68412-54-4	Alkylphenol Ethoxylate	< 100 g/l	Xn	22, 36/38, 53

3. HAZARDS IDENTIFICATION

DO NOT PUT IN A FOOD OR DRINKS CONTAINER.

Harmful in contact with skin and if swallowed. Irritating to eyes, respiratory system and skin. Toxic: danger of serious damage to health by prolonged exposure if swallowed. Corrosive.

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

4. FIRST AID MEASURES

OBTAIN IMMEDIATE MEDICAL ATTENTION. SPEED IS ESSENTIAL.

Refer to the booklet 'Paraquat Poisoning. A Practical Guide to Diagnosis, First Aid and Hospital Treatment'

For further advice on treatment, contact Syngenta 24 hour emergency number 0044 (0) 1484 538444 or the nearest Poisons Information Centre.

Eye contact: Immediately irrigate with eyewash solution or clean water, holding the eyelids apart, for at least 15 minutes. Obtain immediate medical attention.

Skin contact: Take off immediately all contaminated clothing. Wash skin immediately with water, followed by soap and water. Such action is essential to minimise contact with skin. Contaminated clothing should be laundered before re-issue. Obtain medical attention.

Inhalation: Remove patient from exposure, keep warm and at rest. Obtain medical attention.

Ingestion: OBTAIN IMMEDIATE MEDICAL ATTENTION. SPEED IS ESSENTIAL.

Immediately transfer patient to nearest hospital or medical centre, warning by telephone of the estimated arrival time so that the start of treatment is not delayed. Induce vomiting, if this has not already occurred by tickling the back of the throat with a clean, blunt instrument (e.g. spoon handle).

Medical advice

HOSPITAL TREATMENT: Refer to the booklet 'Paraquat Poisoning. A Practical Guide to Diagnosis, First Aid and Hospital 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 (200ml of a 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.

With the possibility of late onset conjunctival ulceration it is advised that patients with paraquat eye injuries are reviewed the day after first presentation. At the review, consideration should be given to treating the eyes with a local antibiotic preparation to prevent secondary infection. Local treatment with a suitable steroid will aid resolution of granulation tissue. Corneal oedema, which may persist for up to 3-4 weeks, may cause blurring of vision

5. FIRE FIGHTING MEASURES

Keep fire exposed containers cool by spraying with water.

Extinguishing media: For small fires, use foam, carbon dioxide or dry powder extinguishant. For large fires, use foam or water-fog; avoid use of water jet. Contain run-off water with, for example, temporary earth barriers.

Protective Equipment: A self contained breathing apparatus and suitable protective clothing should be worn in fire conditions.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Ensure suitable personal protection during removal of spillages. This means wearing eye protection, chemically resistant gloves, boots and coveralls.

Clean up methods: Adsorb spillages onto sand, earth or any suitable adsorbent material. Transfer to a container for disposal. Wash the spillage area with water. Washings must be prevented from entering surface water drains.

Spillages or uncontrolled discharges into water courses must be alerted to the appropriate regulatory body.

7. HANDLING AND STORAGE

Handling

Read the label before use.

Avoid contact with skin and eyes. Do not breathe spray mist. When using do not eat, drink or smoke. Wash face and hands before eating, drinking or smoking.

Storage

Keep in original containers, tightly closed and locked up. Keep out of reach of children. Keep away from food, drink and animal feeding stuffs. Protect from frost.

Storage Life: Physically and chemically stable for at least 2 years when stored in the original unopened sales container at ambient temperatures.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Personal protection

When using this product refer to the label for details. In all other cases, use the following Personal Protective Equipment:

Where suitable engineering controls are not fitted or are inadequate, wear suitable protective equipment. When selecting personal protective equipment, users should consult their supplier to confirm that the equipment is suitable.

Respiratory protection: Wear suitable respiratory protective equipment if exposure to levels above the occupational exposure limit is likely. Respiratory protective equipment should conform to the appropriate EN standard.

Eye protection: Wear suitable eye/face protection conforming to EN 166.

Hand protection: Wear suitable gloves conforming to EN 374.

Body protection: Wear suitable protective clothing.

Occupational exposure limits

Syngenta standard Occupational exposure limits:

Paraquat Emetic; 8 hr TWA 0.02 mg/m³

Pyridine Bases Syngenta; 8 hr TWA 1 ppm, 5 mg/m³ Sk: Can be absorbed through skin

HSE, EH40/2002 Occupation exposure limits:

Paraquat dichloride (Respirable Dust); 8 hr TWA 0.08 mg/m³

Not applicable to field use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form	: Liquid.
Colour	: Dark blue / green.
Odour	: Characteristic of pyridine bases.
Boiling point	: Approx 100 °C, aqueous solution.
Melting point	: Not available.
Flash point	: Does not flash.
Autoignition temperature	: Not available.
Explosive properties	: Not applicable.
Vapour pressure	: Not available.
Solubility	: Soluble in/with water.
pH-value (quant.)	: 6.5 .. 7.5
Partition coeff.	: Not applicable.
Oxidizing properties	: Not applicable.

10. STABILITY AND REACTIVITY

Hazardous reactions, (materials to avoid): Paraquat is highly corrosive to most metals e.g., aluminium, zinc, iron.

Hazardous decomposition products: Combustion or thermal decomposition will evolve toxic and irritant vapours.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity (Lethal Doses)

LD50 Oral male rats: 707 mg formulation/kg

LD50 Oral female rats: 612 mg formulation/kg; Harmful if swallowed.

LD50 Dermal male rats: 590 mg formulation/kg

LD50 Dermal female rats: 735 mg formulation/kg; Harmful in contact with skin.

Inhalation: Nose bleeding and soreness of the throat may result from spray mist or dust trapped on the nasal mucosa. If this occurs review spraying and handling technique.

Acute Toxicity (Irritation, Sensitisation, etc.)

Skin Irritation : Moderate/severe irritant to rabbit skin.

Eye Irritation : Moderate irritant to rabbit eyes. May cause eye irritation in man.

Skin Sensitisation–Buehler : It is not a skin sensitiser in animal tests.

Respiratory Irritation : High concentrations of mist may be irritant to the respiratory tract.

Chronic Toxicological Effects / Long Term Exposure.

Ocular effects (cataracts) have been reported following long term oral exposure of laboratory animals.

12. ECOLOGICAL INFORMATION

Environmental Fate and Distribution

Liquid with low volatility. Information applies to Paraquat ion: The substance is soluble in water. The substance does not leach. The substance does not bioaccumulate. Paraquat is rapidly adsorbed and de-activated by soil.

Ecotoxicity

Harmful if drunk by livestock

Toxicity to fish : LC50 96 hours Rainbow trout: 8.3 mg/l

Toxicity to daphnia: EC50 48 hours *Daphnia magna*: 6 mg/l

Toxicity to algae : EbC50 green algae: 0.11 mg/l

: ErC50 green algae: 0.34 mg/l

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

13. DISPOSAL CONSIDERATIONS

Do not contaminate ponds, waterways or ditches with chemical or used containers. Surplus material must be disposed of as detailed in the '*Guidelines for the avoidance, limitation and disposal of pesticide waste on the farm*' GCPF, 1987. Empty containers should be washed and discarded. Empty containers should not be used for other purposes. Disposal should be in accordance with local, state or national legislation.

14. TRANSPORT INFORMATION

Road transport ADR/RID

UN No. : UN2922
UN Packaging Group : III
Class -primary : 8 Corrosive
-subsidiary : 6.1 Toxic Substance
Proper shipping name : CORROSIVE LIQUID, TOXIC, N.O.S., (CONTAINS PARAQUAT DICHLORIDE 28%)

Maritime transport IMDG

UN No. : UN2922
UN Packaging Group : III
Class -primary : 8 Corrosive
-subsidiary : 6.1 Toxic Substance
Proper shipping name : CORROSIVE LIQUID, TOXIC, N.O.S., (contains paraquat dichloride 28%)
Marine pollutant : No

Air transport ICAO/IATA

UN/ID No. : UN2922
UN Packaging Group : III
Class -primary : 8 Corrosive
-subsidiary : 6.1 Toxic Substance
Proper shipping name : CORROSIVE LIQUID, TOXIC, N.O.S., (contains paraquat dichloride 28%)

15. REGULATORY INFORMATION

Hazard symbols / Classifications:	T	TOXIC
Risk phrases (R):	N	DANGEROUS FOR THE ENVIRONMENT
	21/22	Harmful in contact with skin and if swallowed.
	36/37/38	Irritating to eyes, respiratory system and skin.
	48/25	Toxic: danger of serious damage to health by prolonged exposure if swallowed.
	50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Safety phrases (S):	2	Keep out of the reach of children.
	13	Keep away from food, drink and animal feeding stuffs.
	20/21	When using, do not eat, drink or smoke.
	35	This material and its container must be disposed of in a safe way.
	36/37	Wear suitable protective clothing and gloves.
	45	In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
	57	Use appropriate containment to avoid environmental contamination.
Special label:		To avoid risks to man and the environment, comply with the instructions for use.

Users should ensure that they comply with any relevant local, state or national legislation.

16. OTHER INFORMATION

Always read the label. Use pesticides safely.

Based upon SDS version 8, release date 18/12/02 with DPD update. Significant revision to sections 2,3 & 15.

Approval number; MAPP 10526.

This data sheet was prepared in accordance with Directive 91/155/EEC (93/112/EC, 2001/58/EC)

The information on this sheet is not a specification, it does not guarantee specific properties. The information is intended to provide general guidance as to health and safety based upon our knowledge of the handling, storage and use of the product. It is not applicable to unusual or non-standard uses of the product nor where instructions or recommendations are not followed.