Safety Data Sheet

SANONDA
(AUSTRALIA) PTY LTD

Infosafe	Issue Date: August 2022	ISSUED by SANONDA

Product Name **SANONDA PARAQUAT 250 HERBICIDE**
Classified as hazardous

1. Identification

GHS Product Identifier	Sanonda Paraquat 250 Herbicide
Product Code	7205
Product Type	Group 22 Herbicide
Company Name	Sanonda (Australia) Pty Ltd (ABN 23 059 813 973)
Address	Suite 822, St Kilda Road Towers, No. 1 Queens Road, Melbourne, Victoria 3004 Australia
Telephone/Fax	Tel: +61 3 9863 8081 Fax: +61 3 9863 8083
Poisons Information Centre:	Phone 13 1126 from anywhere in Australia
Other Information	This Safety Data Sheet describes, to the best of our knowledge, the properties of the concentrated product. The physical properties and some of the assessments do not apply to the properties of the product once it has been diluted for application. Acute health effects of the diluted product are likely to be much less severe.

2. Hazard Identification

Statement of Hazardous Nature	This product is classified as: Xi, Irritating. T, Toxic. N, Dangerous to the environment. Hazardous according to the criteria of SWA. Dangerous according to Australian Dangerous Goods (ADG) Code, IATA and IMDG/IMSBC criteria.
SUSMP Classification:	S7
ADG Classification:	Class 8: Corrosive Substances. Sub Risk:
Subsidiary Risk:	**Class 6.1: Toxic substances.**
UN Number:	2922, CORROSIVE LIQUID, TOXIC, N.O.S.
GHS classification of the substance/mixture	Acute Toxicity Oral Category 3 Acute Toxicity Dermal Category 3 Skin Corrosion /Irritation Category 2 Serious eye damage/eye irritation Category 2B Acute Toxicity Inhalation Category 1/2 Specific Target Organ Toxicity - Single Exposure Category 3 Specific Target Organ toxicity - repeated exposure Category 1 Hazardous to aquatic environment Short term/Chronic Category 1
Signal Word (s)	DANGER
Hazard Statement (s)	H301: Toxic if swallowed. H311: Toxic in contact with skin. H315: Causes skin irritation. H320: Causes eye irritation. H330: Fatal if inhaled. H335: May cause respiratory irritation. H372: Causes damage to organs through prolonged or repeated exposure. H410: Very toxic to aquatic life with long lasting effects.
Pictogram (s)	
Precautionary statement – Prevention	P102: Keep out of reach of children. P260: Do not breathe fumes, mists, vapours or spray. P262: Do not get in eyes, on skin, or on clothing. P264: Wash contacted areas 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 and eye or face protection. P284: Wear respiratory protection.
Precautionary statement – Response	P310: Immediately call a POISON CENTRE or doctor/physician. P361: Remove all contaminated clothing immediately. P363: Wash contaminated clothing before reuse. P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. P302+P352: IF ON SKIN: Wash with plenty of soap and 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. P332+P313: If skin irritation occurs: Get medical advice. P337+P313: If eye irritation persists: Get medical advice. P391: Collect spillage. P370+P378: Not combustible. Use extinguishing media suited to burning materials. Water fog or fine spray is the preferred medium for large fires.
Precautionary statement – Storage	P405: Store locked up. P410: Protect from sunlight. P402+P404: Store in a dry place. Store in a closed container. P403+P235: Store in a well-ventilated place. Keep cool.
Precautionary statement – Disposal	P501: If they can not be recycled, dispose of contents to an approved waste disposal plant and containers to landfill (see Section 13 of this SDS).
Emergency Overview	Physical Description & colour: Clear dark blue liquid. Odour: Obnoxious pyridine odour. Major Health Hazards: Very toxic by inhalation, toxic in contact with skin and if swallowed, irritating to eyes, respiratory system and skin.

3. Composition/information on ingredients

Chemical Characterization Liquid

Ingredients

Name	CAS	Concentration,g/L	TWA (mg/m³)	STEL (mg/m³)
Paraquat (as dichloride)	1910-42-5	250	not set	not set
Other non-hazardous ingredients*	-	<100	not set	not set
Water	7732-18-5	To 1000		

* This includes pyridine to make product taste foul and an emetic to cause vomiting if swallowed. This is a commercial product whose exact ratio of components may vary slightly. Minor quantities of other non hazardous ingredients are also possible.
The TWA exposure value is the average airborne concentration of a particular substance when calculated over a normal 8 hour working day for a 5 day working week. The STEL (Short Term Exposure Limit) is an exposure value that should not be exceeded for more than 15 minutes and should not be repeated for more than 4 times per day. There should be at least 60 minutes between successive exposures at the STEL. The term "peak "is used when the TWA limit, because of the rapid action of the substance, should never be exceeded, even briefly.

4. First-aid measures

General Information You should call The Poisons Information Centre if you feel that you may have been poisoned, burned or irritated by this product. The number is 13 1126 from anywhere in Australia and is available at all times. Have this SDS with you when you call.

Ingestion If swallowed, do NOT induce vomiting; rinse mouth thoroughly with water and contact a Poisons Information Centre, or call a doctor at once. Give activated charcoal if instructed.

Eye contact: Immediately flush the contaminated eye(s) with lukewarm, gently flowing water for 15 minutes or until the product is removed, while holding the eyelid(s) open. Take care not to rinse contaminated water into the unaffected eye or onto the face. Obtain medical attention immediately. Take special care if exposed person is wearing contact lenses.

Skin contact: Flush contaminated area with lukewarm, gently flowing water for at least 20-30 minutes, by the clock. DO NOT INTERRUPT FLUSHING. If necessary, keep emergency vehicle waiting (show paramedics this SDS and take their advice). Under running water, remove contaminated clothing, shoes and leather goods (eg watchbands and belts). If breathing has stopped, trained personnel should begin artificial respiration or, if the heart has stopped, cardiopulmonary resuscitation (CPR) immediately.

Inhalation: If inhalation occurs, contact a Poisons Information Centre. Urgent hospital treatment is likely to be needed. Remove source of contamination or move victim to fresh air. If breathing is difficult, oxygen may be beneficial if administered by trained personnel, preferably on a doctor's advice. DO NOT allow victim to move about unnecessarily. Symptoms of pulmonary oedema can be delayed up to 48 hours after exposure.

Advice to Doctor Treat symptomatically. No specific antidote.

5. Fire-fighting measures

Fire and Explosion Hazards: There is no risk of an explosion from this product under normal circumstances if it is involved in a fire.
This product is likely to decompose only after heating to dryness, followed by further strong heating. Fire decomposition products from this product may be toxic if inhaled. Take appropriate protective measures.

Extinguishing Media: Water fog or fine spray is the preferred medium for large fires. Try to contain spills, minimise
spillage entering drains or water courses.

Fire Fighting: If a significant quantity of this product is involved in a fire, call the fire brigade. There is little danger of a violent reaction or explosion if significant quantities of this product are involved in a fire. Recommended personal protective equipment is liquid-tight chemical protective clothing and breathing apparatus.

Flash point: Does not burn.
Upper Flammability Limit: Does not burn.
Lower Flammability Limit: Does not burn.
Autoignition temperature: Not applicable - does not burn.
Flammability Class: Does not burn.

6. Accidental release measures

Accidental release:
In the event of a major spill, prevent spillage from entering drains or water courses. Evacuate the spill area and deny entry to unnecessary and unprotected personnel. Wear full protective chemically resistant clothing including face mask, face shield, gauntlets and self contained breathing apparatus. See above under Personal Protection regarding Australian Standards relating to personal protective equipment. Suitable materials for protective clothing include rubber, PVC. Stop leak if safe to do so, and contain spill. Absorb onto sand, vermiculite or other suitable absorbent material. If spill is too large or if absorbent material is not available, try to create a dike to stop material spreading or going into drains or waterways. Because of the toxicity of this product, special personal
care should be taken in any cleanup operation. Sweep up and shovel or collect recoverable product into labelled containers for recycling or salvage, and dispose of promptly. After

spills, wash area preventing runoff from entering drains. If a significant quantity of material enters drains, advise emergency services. Full details regarding disposal of used containers, spillage and unused material may be found on the label. If there is any conflict between this SDS and the label, instructions on the label prevail. Ensure legality of disposal by consulting regulations prior to disposal.
Thoroughly launder protective clothing before storage or re-use. Advise laundry of nature of contamination when sending contaminated clothing to laundry.

7. Handling and storage

Precautions for Safe Handling

Keep exposure to this product to a minimum, and minimise the quantities kept in work areas. Check Section 8 of this SDS for details of personal protective measures, and make sure that those measures are followed. The measures detailed below under "Storage" should be followed during handling in order to minimise risks to persons using the product in the workplace. Also, avoid contact or contamination of product with incompatible materials listed in Section 10.

Conditions for safe storage, including any incompatabilities Tank Cleaning

This product is a Scheduled Poison. Observe all relevant regulations regarding sale, transport and storage of this class of poison. Store in a cool, well ventilated area. Check containers periodically for leaks. Containers should be kept closed in order to minimise contamination. Make sure that the product does not come into contact with substances listed under "Materials to avoid" in Section 10. If you keep more than 1000kg or 1000L of Toxic Substances of Packaging Group III, you will require a license to do so. If you have any doubts, we suggest you contact your licensing authority in order to clarify your obligations. Check packaging - there may be further storage instructions on the label.

8. Exposure controls/personal protection

Occupational exposure limit values

The following Australian Standards will provide general advice regarding safety clothing and equipment:
Respiratory equipment: **AS/NZS 1715**, Protective Gloves: **AS 2161**, Occupational Protective Clothing: AS/NZS 4501 set 2008, Industrial Eye Protection: **AS1336** and **AS/NZS 1337**, Occupational Protective Footwear: **AS/NZS2210.**

SWA Exposure Limits	**TWA (mg/m3)**	**STEL (mg/m3)**

Exposure limits have not been established by SWA for any of the significant ingredients in this product. The ADI for Paraquat is set at 0.004mg/kg/day. The corresponding NOEL is set at 0.38mg/kg/day. ADI means Acceptable Daily Intake and NOEL means No-observable-effect-level. Values taken from Australian ADI List, June 2013.

Ventilation:

Make sure that the work environment remains clean and that vapours and mists are minimised.

Eye Protection:

Protective glasses or goggles should be worn when this product is being used. Failure to protect your eyes may cause them harm. Emergency eye wash facilities are also recommended in an area close to where this product is being used.

Skin Protection:

It is essential that all skin areas are adequately covered by impermeable gloves, overalls, hair covering, apron and face shield. See below for suitable material types.

Protective Material Types:

There is no specific recommendation for any particular protective material type.

Respirator:

Usually, no respirator is necessary when using this product. However, if you have any doubts consult the Australian Standard mentioned above. Eyebaths or eyewash stations and safety deluge showers should be provided near to where this product is being handled commercially.

9. Physical and chemical properties

Product Name **SANONDA PARAQUAT 250 HERBICIDE**
Classified as hazardous

Form	Liquid.
Appearance	Clear dark blue liquid.
Boiling point	Approximately 100°C at 100kPa.
Odour	Obnoxious pyridine odour.
pH	No data.
Freezing/Melting Point:	Approximately 0°C.
Vapor pressure	2.37 kPa at 20°C (water vapour pressure).
Specific gravity	1.08.
Solubility in water	Completely soluble in water.

10. Stability and reactivity

Reactivity	This product is unlikely to react or decompose under normal storage conditions. However, if you have any doubts, contact the supplier for advice on shelf life properties.
Conditions to avoid	This product should be kept in a cool place, preferably below 30°C. Containers should be kept dry. Keep isolated from combustible materials.
Incompatibilities	No particular incompatibilities.
Fire decomposition	This product is likely to decompose only after heating to dryness, followed by further strong heating. Carbon dioxide, and if combustion is incomplete, carbon monoxide and smoke. Nitrogen and its compounds, and under some circumstances, oxides of nitrogen. Occasionally hydrogen cyanide gas. Hydrogen chloride gas, other compounds of chlorine. Water. Carbon monoxide poisoning produces headache, weakness, nausea, dizziness, confusion, dimness of vision, disturbance of judgment, and unconsciousness followed by coma and death. Hydrogen cyanide poisoning signs and symptoms are weakness, dizziness, headache, nausea, vomiting, coma, convulsions, and death. Death results from respiratory arrest. Hydrogen cyanide gas acts very rapidly; symptoms and death can both occur quickly.
Polymerization	This product is unlikely to undergo polymerisation processes.

11. Toxicological Information

Target organ	There is no data to hand indicating any particular target organs.
Classification of Hazardous Ingredients	Ingredient: Paraquat Dichloride. Risk Phrases: Concentration>=25%: T+; R26; R24/25; R48/25; R36/37/38
Acute Toxicity - Oral	LD_{50} (rat) = 129 - 157 mg/kg for paraquat dichloride. LD_{50} (guinea pig) 30 - 58 mg/kg.
Acute Toxicity - Dermal	LD_{50} (rat) = 911 mg/kg for paraquat dichloride. LD_{50} (rabbit) = 240 mg/kg for paraquat ion.
Skin irritation	The product is an eye irritant.
Inhalation	LC_{50} (rat) = 0.5 - 1.5 µg/L/4 hr for paraquat dichloride.
Eye	The product is an eye irritant.
Skin sensitization	The product is a skin sensitiser.
Chronic Toxicity	Based on available data, repeated exposures are not anticipated to cause additional significant adverse effects.
Carcinogen Status	Studies in animals have shown that repeated doses of paraquat do not produce carcinogenic nor teratogenic effects or adverse reproductive effects. The dietary no effect level in the rat was 25 ppm of paraquat over 2 years. The AOl (Acceptable Daily Intake) for humans (paraquat cation) is 0.004 mg/kg/day.

Potential Health Effects

Inhalation:
Short Term Exposure: Available data shows that this product is very toxic, but symptoms are not available. In addition product is an inhalation irritant. Symptoms may include headache, irritation of nose and throat and increased secretion of mucous in the nose and throat. Other symptoms may also become evident, but they should disappear after exposure has ceased.

Long Term Exposure: No data for health effects associated with long term inhalation.

Skin Contact:

Short Term Exposure: Available data shows that this product is toxic, but further symptoms are not available. In addition product is a skin irritant. Symptoms may include itchiness and reddening of contacted skin. Other symptoms may also become evident, but all should disappear once exposure has ceased.

Long Term Exposure: No data for health effects associated with long term skin exposure.

Eye Contact:

Short Term Exposure: This product is an eye irritant. Symptoms may include stinging and reddening of eyes and watering which may become copious. Other symptoms may also become evident. If exposure is brief, symptoms
should disappear once exposure has ceased. However, lengthy exposure or delayed treatment may cause permanent damage.

Long Term Exposure: No data for health effects associated with long term eye exposure.

Ingestion:

Short Term Exposure: Significant oral exposure is considered to be unlikely. Available data shows that this product is toxic, but further symptoms are not available. However, this product is an oral irritant. Symptoms may include burning sensation and reddening of skin in mouth and throat. Other symptoms may also become evident, but all should disappear once exposure has ceased.

Long Term Exposure: No data for health effects associated with long term ingestion.

Carcinogen Status:

SWA: No significant ingredient is classified as carcinogenic by SWA.
NTP: No significant ingredient is classified as carcinogenic by NTP.
IARC: No significant ingredient is classified as carcinogenic by IARC.

12. Ecological information

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

Birds	LD50 hen: 262-380mg/kg LD50 (5 days) bobwhite quail: 981mg/kg LD50 Japanese quail: 970mg/kg LD50 mallard duck: 4048mg/kg
Fish	LC50 (96 hr) rainbow trout: 32mg/L LC50 brown trout: 2.15-13mg/L
Bees	Not toxic to bees.

Environmental fate

Animals	In rats, following oral administration, 76-90% of the dose was excreted in the faeces, and 11-20% in urine.
Plants	On plant surfaces, photochemical degradation occurs. Degradation products which have been isolated include 1-methyl-4-carboxypyridinium chloride and methylamine hydrochloride.
Soil/environment	Clays and organic materials rapidly and strongly absorb paraquat, resulting in complete deactivation. Typical strong absorption capacities vary from 20-3000mg/kg soil depending on clay or organic material content. Desorption requires digestion with 12N sulfuric acid for several hours.

13. Disposal considerations

Disposal method	Special help is available for the disposal of Agricultural Chemicals. The product label will give general advice regarding disposal of small quantities, and how to cleanse containers. However, for help with the collection of unwanted rural chemicals, contact ChemClear 1800 008 182 http://www.chemclear.com.au/ and for help with the disposal of empty drums, contact DrumMuster http://www.drummuster.com.au/ where you will find contact details for your area.

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14. Transport information

UN Number (Sea Transport)	2922, CORROSIVE LIQUID, TOXIC, N.O.S.
Hazchem Code	2X
Special provisions	223, 274
Limited quantities	ADG 7 specifies a Limited Quantity value of 5 L for this class of product.
Subsidiary risk	Class 6.1, Toxic Substances
Packing Group	III
Dangerous Goods Class	Class 8, Corrosive Substances.
Other information	Class 8 Corrosive Substances shall not be loaded in the same vehicle or packed in the same freight container with Classes 1 (Explosives), 4.3 (Dangerous When Wet Substances), 5.1 (Oxidising Agents), 5.2 (Organic Peroxides), 6 (Toxic Substances where the Toxic Substances are cyanides and the Corrosives are acids), 7 (Radioactive Substances), Foodstuffs and foodstuff empties. They may however be loaded in the same vehicle or packed in the same freight container with Classes 2.1 (Flammable Gases), 2.2 (Non-Flammable, Non-Toxic Gases), 2.3 (Poisonous Gases), 3 (Flammable liquids), 4.1 (Flammable Solids), 4.2 (Spontaneously Combustible Substances), 6 (Toxic Substances except where the Toxic Substances are cyanides and the Corrosives are acids) and 9 (Miscellaneous Dangerous Goods).

15. Regulatory information

AICS: All of the significant ingredients in this product are compliant with NICNAS regulations. The following ingredient: Paraquat, is mentioned in the SUSMP.

16. Other Information

This SDS contains only safety-related information. For other data see product literature.

Acronyms:

ADG Code: Australian Code for the Transport of Dangerous Goods by Road and Rail, 7th Edition

AICS: Australian Inventory of Chemical Substances

CAS number: Chemical Abstracts Service Registry Number

Hazchem Code: Emergency action code of numbers and letters that provide information to emergency services especially firefighters

IARC: International Agency for Research on Cancer

SWA: Safe Work Australia, formerly ASCC and NOHSC

NOS: Not otherwise specified

NTP: National Toxicology Program (USA)

SUSMP: Standard for the Uniform Scheduling of Medicines & Poisons

UN Number: United Nations Number

...End Of MSDS...