Safety Data Sheet

according to WHS Regulations

Printing date 08.07.2020

Revision: 08.07.2020

1 Identification

Product Name: RELYON 2,4-D AMINE 625 HERBICIDE

Other Means of Identification: Mixture

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

Details of Manufacturer or Importer: Nutrien Ag Solutions Limited Level 5, Building A 26 Talavera Road Macquarie Park NSW 2113

Phone Number: 02 9889 5400

Emergency telephone number: National Poison 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.

Not subject to the ADG Code when transported in Australia by Road or Rail in packages 500kg(L) or less; or IBCs (refer to SP AU01). However if transported by Air or Sea, this provision does not apply. Then the product is classed as Dangerous (Class 9 Environmentally Hazardous) by IATA and IMDG/IMSBC respectively. See details below and in Section 14 of this SDS.



Serious Eye Damage/Irritation 1 H318 Causes serious eye damage.



Aquatic Chronic 2

H411 Toxic to aquatic life with long lasting effects.



Acute Toxicity (Oral) 4	H302 Harmful if swallowed.
Skin Corrosion/Irritation 2	H315 Causes skin irritation.
Skin Sensitisation 1	H317 May cause an allergic skin reaction.
STOT SE 3	H335 May cause respiratory irritation.
Aquatic Acute 2	H401 Toxic to aquatic life.

Signal Word Danger

Hazard Statements

H302 Harmful if swallowed. H315 Causes skin irritation. H318 Causes serious eye damage. H317 May cause an allergic skin reaction. H335 May cause respiratory irritation. H411 Toxic to aquatic life with long lasting effects.

Precautionary Statements

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

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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.
P272	Contaminated work clothing should not be allowed out of the workplace.
P273	Avoid release to the environment.
P280	Wear protective gloves / 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 person to fresh air and keep comfortable for breathing.
P305+P351+P338	B 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).
P330	Rinse mouth.
P362+P364	Take off contaminated clothing and wash it before reuse.
P333+P313	If skin irritation or rash 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 regulations.

3 Composition and Information on Ingredients

Chemical Characterization: Mixtures

Description: Mixture of substances listed below with nonhazardous additions.

Hazardous Components:

CAS: 2008-39-1	2,4-D dimethylamine salt, Acetic acid, (2,4-dichlorophenoxy)-, compound with N-methylmethanamine (1:1)	30 - 60%
	Serious Eye Damage/Irritation 1, H318; Aquatic Chronic 2, H411; Acute Toxicity (Oral) 4, H302; Skin Sensitisation 1, H317; Aquatic Acute 2, H401	
CAS: 5742-19-8	2,4-D, diethanolamine salt, Acetic acid, (2,4-dichlorophenoxy)-, compound with 2,2'-iminobis[ethanol] (1:1),	30 - 60%
	Skin Corrosion/Irritation 2, H315; Serious Eye Damage/Irritation 2A, H319; STOT SE 3, H335	

Additional information: Concentrations of the individual salts are not available. 2,4-D is present at 625g/L.

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 symptoms occur.

Eye Contact:

In case of eye contact, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek medical attention if symptoms occur.

Ingestion:

If swallowed, do not induce vomiting. Wash mouth with water. Do not give anything by mouth to an unconscious person. Seek immediate medical attention.

Symptoms Caused by Exposure:

Inhalation: May cause respiratory irritation, coughing, dizziness, headache, vomiting and diarrhoea. Skin Contact: Causes skin irritation and reddening. May cause an allergic skin reaction.

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Eye Contact: Causes serious eye damage, reddening and watering. Ingestion: Harmful if swallowed. May cause burning sensation in mouth and throat.

5 Fire Fighting Measures

Suitable Extinguishing Media: Use fire extinguishing methods suitable to surrounding conditions.

Specific Hazards Arising from the Chemical:

Hazardous combustion products include oxides of carbon and nitrogen.

This product is not flammable, but may decompose in a fire.

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

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.

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. Food, beverages and tobacco products should not be stored or consumed where this material is in use. Always 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 in original container tightly closed when not in use. Protect from direct sunlight. Keep away from strong oxidising agents, acids and bases.

8 Exposure Controls and Personal Protection

Exposure Standards:

CAS: 94-75-7 2,4-D (ISO)

WES TWA: 10 mg/m³ Sen

Engineering Controls: Ensure adequate ventilation of the working area.

Respiratory Protection:

Use an approved vapour respirator 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:

PVC, PVA, nitrile, neoprene, rubber or vinyl 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.

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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:

Eye and face protectors for protection against splashing materials or liquids. See Australian/New Zealand Standard AS/NZS 1337 for more information.

9 Physical and Chemical Properties

Appearance:	
Form:	Liquid
Colour:	Clear reddish-brown
Odour:	Mild ammoniacal odour
Odour Threshold:	No information available
pH-Value:	No information available
Melting point/freezing point:	<0 °C
Initial Boiling Point/Boiling Range:	100 °C
Flash Point:	Not applicable
Flammability:	Product is not flammable.
Auto-ignition Temperature:	Not applicable
Decomposition Temperature:	Not determined.
Explosion Limits:	
Lower:	Not applicable
Upper:	Not applicable
Vapour Pressure at 20 °C:	2.37 kPa
Relative Density at 20 °C:	~1.25
Vapour Density:	Not determined.
Evaporation Rate:	Not determined.
Solubility in Water:	Completely soluble
Partition Coefficient (n-octanol/water):	No information available
Viscosity:	No information available

10 Stability and Reactivity

Possibility of Hazardous Reactions: Hazardous polymerisation will not occur.

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

Conditions to Avoid: Direct sunlight.

Incompatible Materials: Strong oxidising agents, acids and bases.

Hazardous Decomposition Products: Oxides of carbon and nitrogen.

11 Toxicological Information

Toxicity:

LD50/LC50 Values Relevant for Classification:

CAS: 94-75-7 2,4-D (ISO)

Oral LD50 699 mg/kg (rat) Dermal LD50 >2000 mg/kg (rat)

Acute Health Effects

Inhalation: May cause respiratory irritation, coughing, dizziness, headache, vomiting and diarrhoea.

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Skin: Causes skin irritation and reddening. May cause an allergic skin reaction. **Eye:** Causes serious eye damage, reddening and watering. **Ingestion:** Harmful if swallowed. May cause burning sensation in mouth and throat.

Skin Corrosion / Irritation: Causes skin irritation.

Serious Eye Damage / Irritation: Causes serious eye damage.

Respiratory or Skin Sensitisation: May cause an allergic skin reaction.

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

Carcinogenicity: This product does NOT contain any IARC listed chemicals.

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:

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

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

Chronic Health Effects: Repeated or prolonged exposure may cause liver and kidney dysfunction.

Existing Conditions Aggravated by Exposure: No information available

Additional toxicological information:

The Australian Acceptable Daily Intake (ADI) for 2.4-D for a human is 0.01 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOAEL of 1 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', 2020).

12 Ecological Information

Ecotoxicity:

2,4-D is moderately toxic to birds. Moderate doses of 2,4-D severely impair honeybees brood production.

Aquatic toxicity: Toxic to aquatic life with long lasting effects.

Persistence and Degradability:

2,4-D has low soil persistence. The half-life in soil is less than 7 days. In aquatic environments, microorganisms readily degrade 2,4-D.

Bioaccumulative Potential: No information available

Mobility in Soil: No information available Other adverse effects: No 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

UN3082

Proper Shipping Name ADG, IMDG, IATA

ENVIRONMENTALLY HAZARDOUS SUBSTANCE , LIQUID, N.O.S. (2,4-D dimethylamine salt, Acetic acid, (Contd. on page 6)

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	(2,4-dichlorophenoxy)-, compound with N- methylmethanamine (1:1))
Dangerous Goods Class ADG Class:	9 Miscellaneous dangerous substances and articles.
Packing Group: ADG IMDG, IATA	Not regulated III
Marine pollutant:	No
EMS Number:	F-A,S-F
Hazchem Code:	•3Z
Special Provisions:	274, 331, 335, 375, AU01
Limited Quantities:	5L
Packagings & IBCs - Packing Instruction:	P001, IBC03, LP01
Packagings & IBCs - Special Packing Provisions:	PP1
Portable Tanks & Bulk Containers - Instructions:	Τ4
Portable Tanks & Bulk Containers - Special Provisions:	TP1, TP29
15 Regulatory Information	

Australian Inventory of Chemical Substances: CAS: 2008-39-1 2,4-D dimethylamine salt, Acetic acid, (2,4-dichlorophenoxy)-, compound with N-methylmethanamine (1:1) CAS: 5742-19-8 2,4-D, diethanolamine salt, Acetic acid, (2,4-dichlorophenoxy)-, compound with 2,2'-iminobis[ethanol] (1:1), CAS: 7732-18-5 Water

Standard for the Uniform Scheduling of Drugs and Poisons (SUSMP) - Poison Schedule: Poisons Schedule: 5

www.msds.com.au

16 Other Information

Date of Preparation or Last Revision: 08.07.2020

Prepared by: MSDS.COM.AU Pty Ltd

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) Acute Toxicity (Oral) 4: Acute toxicity – Category 4 Skin Corrosion/Irritation 2: Skin corrosion/Irritation – Category 2 Serious Eye Damage/Irritation 1: Serious eye damage/eye irritation – Category 1

Serious Eye Damage/Irritation 2A: Serious eye damage/eye irritation - Category 2A

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STOT SE 3: Specific target organ toxicity (single exposure) – Category 3 Aquatic Acute 2: Hazardous to the aquatic environment, short-term (Acute). Category 2 Aquatic Chronic 2: Hazardous to the aquatic environment, long-term (Chronic). Category 2

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 - May 2018"

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