

Safety Data Sheet

according to WHS Regulations

Printing date 28.07.2020

Revision: 28.07.2020

1 Identification

Product Name: RELYON TRIFLURALIN 480 SELECTIVE 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 classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. (7th edition)



health hazard

Carcinogenicity 2 H351 Suspected of causing cancer.



environment

Aquatic Chronic 1 H410 Very toxic to aquatic life with long lasting effects.



Skin Sensitisation 1 H317 May cause an allergic skin reaction.

Flammable Liquids 4 H227 Combustible liquid.

Signal Word Warning

Hazard Statements

H227 Combustible liquid.

H317 May cause an allergic skin reaction.

H351 Suspected of causing cancer.

H410 Very toxic to aquatic life with long lasting effects.

Precautionary Statements

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P210 Keep away from flames and hot surfaces. No smoking.

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

P272 Contaminated work clothing should not be allowed out of the workplace.

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P302+P352 IF ON SKIN: Wash with plenty of water.

P308+P313 IF exposed or concerned: Get medical advice/attention.

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- P321 Specific treatment (see on this label).
 P362+P364 Take off contaminated clothing and wash it before reuse.
 P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
 P370+P378 In case of fire: Use for extinction: CO₂, powder or water spray.
 P391 Collect spillage.
 P403+P235 Store in a well-ventilated place. Keep cool.
 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: 1582-09-8	Trifluralin	48%
	Carcinogenicity 2, H351; Aquatic Chronic 1, H410; Skin Sensitisation 1, H317	

Additional information: Liquid hydrocarbon, CAS No. not supplied - 49%

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, hold eyelids open and rinse with water for at least 15 minutes. Seek medical attention if symptoms occur.

Ingestion:

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

Symptoms Caused by Exposure:

Inhalation: May cause mild irritation.

Skin Contact: May cause skin irritation, itchiness and reddening. May cause an allergic skin reaction, rash and inflammation.

Eye Contact: May cause eye irritation, stinging, reddening and watering.

Ingestion: May cause irritation to mucous membranes.

5 Fire Fighting Measures

Suitable Extinguishing Media: Water fog, foam, dry chemical or carbon dioxide.

Specific Hazards Arising from the Chemical:

Hazardous combustion products include oxides of carbon, nitrogen, oxides of nitrogen, other nitrogen compounds, hydrogen cyanide, hydrogen fluoride, other fluorine compounds and water.

Combustible liquid.

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.

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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. Extinguish all sources of ignition. Avoid sparks and open flames. No smoking.

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. Wash spill area, preventing runoff from entering drains.

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. 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 wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use. Contaminated work clothing must not be allowed out of the workplace. 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 heat, sparks, open flames, hot surfaces and direct sunlight. Keep away from strong oxidising agents.

8 Exposure Controls and Personal Protection

Exposure Standards:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

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 or rubber 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:

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

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9 Physical and Chemical Properties

Appearance:	
Form:	Liquid
Colour:	Bright orange
Odour:	Hydrocarbon
Odour Threshold:	No information available
pH-Value:	No information available
Melting point/freezing point:	No information available
Initial Boiling Point/Boiling Range:	No information available
Flash Point:	70- 72 °C
Flammability:	Combustible
Auto-ignition Temperature:	Not applicable
Decomposition Temperature:	No information available
Explosion Limits:	
Lower:	No information available
Upper:	No information available
Vapour Pressure:	No information available
Relative Density at 20 °C:	1.08- 1.10
Vapour Density:	No information available
Evaporation Rate:	No information available
Solubility in Water:	Emulsifies into water.
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: Heat, sparks, open flames, hot surfaces and direct sunlight.

Incompatible Materials: Strong oxidising agents.

Hazardous Decomposition Products:

Oxides of carbon, nitrogen, oxides of nitrogen, other nitrogen compounds, hydrogen cyanide, hydrogen fluoride, other flourine compounds and water.

11 Toxicological Information

Toxicity:

LD50/LC50 Values Relevant for Classification:

CAS: 1582-09-8 Trifluralin

Oral	LD ₅₀	>10000 mg/kg (rat)
		>2000 mg/kg (dog)
		>2000 mg/kg (rabbit)
		>5000 mg/kg (mice)

Acute Health Effects

Inhalation: May cause mild irritation.

Skin:

May cause skin irritation, itchiness and reddening. May cause an allergic skin reaction, rash and inflammation.

Eye: May cause eye irritation, stinging, reddening and watering.

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Ingestion: May cause irritation to mucous membranes.**Skin Corrosion / Irritation:** Based on classification principles, the classification criteria are not met.**Serious Eye Damage / Irritation:** Based on classification principles, the classification criteria are not met.**Respiratory or Skin Sensitisation:** May cause an allergic skin reaction.**Germ Cell Mutagenicity:** Based on classification principles, the classification criteria are not met.**Carcinogenicity:**

Suspected of causing cancer.

Trifluralin is classified by IARC as Group 3 - Not classifiable as to its carcinogenicity to humans.

Reproductive Toxicity: Based on classification principles, the classification criteria are not met.**Specific Target Organ Toxicity (STOT) - Single Exposure:**

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

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:** Prolonged exposure or delayed treatment may cause permanent eye damage.**Existing Conditions Aggravated by Exposure:** No information available**Additional toxicological information:**

The Australian Acceptable Daily Intake (ADI) for trifluralin for a human is 0.02 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOAEL of 2.5 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:

Trifluralin is practically nontoxic to birds and bees.

Oral LD50 >2000 mg/kg (bobwhite quail)

Oral LD50 >2000 mg/kg (mallard duck)

Oral LD50 >2000 mg/kg (pheasant)

Trifluralin is toxic to earthworms.

Aquatic toxicity:

Very Toxic to aquatic life with long lasting effects.

CAS: 1582-09-8 TrifluralinLC₅₀/48 h 0.5- 0.6 mg/L (daphnia)LC₅₀/96 h 0.02- 0.06 mg/L (rainbow trout)

0.05- 0.07 mg/L (bluegill)

1.4- 3.4 mg/L (fish)

Persistence and Degradability: Moderately to highly persistent. Half-life in soil: 45 days - 8 months.**Bioaccumulative Potential:** No information available**Mobility in Soil:** No information available**Other adverse effects:** No information available

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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

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).

IMDG, IATA

UN3082

Proper Shipping Name

ADG

Not regulated

IMDG, IATA

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains trifluralin)

Dangerous Goods Class

ADG Class:

Not regulated

IMDG Class:

9 Miscellaneous dangerous substances and articles
Miscellaneous dangerous substances and articles.

Packing Group:

ADG

Not regulated

IMDG, IATA

III

Marine pollutant:

Yes (P)

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:

T4

Portable Tanks & Bulk Containers - Special

Provisions:

TP1, TP29

15 Regulatory Information

Australian Inventory of Chemical Substances:

CAS: 1582-09-8 | Trifluralin

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

Poisons Schedule: 5

16 Other Information

Date of Preparation or Last Revision: 28.07.2020

Prepared by: MSDS.COM.AU Pty Ltd

www.msds.com.au

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Abbreviations and acronyms:

ADG: Australian Dangerous Goods

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

P: Marine Pollutant

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 4: Flammable liquids – Category 4

Skin Sensitisation 1: Skin sensitisation, Hazard Category 1

Carcinogenicity 2: Carcinogenicity – Category 2

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

Data altered compared to the previous version:

Section 1: Details Of Manufacturer Or Importer.

Section 5: Specific Hazards Arising From The Chemical.

Section 9: Flammability.

Section 11: Carcinogenicity.

Section 11: Additional Toxicological Information.

Section 12: Aquatic Toxicity.

Section 14: Un Number.

Section 14: Special Provisions.

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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