



SAFETY DATA SHEET
VALOR EZE 480 SC Herbicide

According to Preparation of Safety Data Sheets for Hazardous Chemicals Code of Practice, July 2020.

SECTION 1: Identification: Product identifier and chemical identity

Product identifier

Product name VALOR EZE 480 SC Herbicide
Synonyms; trade names VALOR SC Herbicide, Nufarm TERRAIN Flow Herbicide, Flumioxazin 480 SC Herbicide

Relevant identified uses of the substance or mixture and uses advised against

Application Herbicide
Uses advised against No specific uses advised against are identified.

Details of the supplier of the safety data sheet

Supplier www.sumitomo-chem.com.au
Sumitomo Chemical Australia Pty Ltd
Level 5, 51 Rawson Street,
EPPING, NSW 2121
(02) 8752 9000
(02) 8752 9099
Reception@sumitomo-chem.com.au

Emergency telephone number

Emergency telephone 1800 033 111 (Australia) 0800 734 607 (New Zealand)
National emergency telephone number Poisons Information Centre - Phone Australia 13 11 26; New Zealand 0800 764 766.

SECTION 2: Hazard(s) identification

Classification of the substance or mixture

Physical hazards Not Classified
Health hazards Repr. 2 - H361d
Environmental hazards Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410

Label elements

Hazard pictograms



Signal word WARNING

Hazard statements H361d Suspected of damaging the unborn child.
H410 Very toxic to aquatic life with long lasting effects.

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| Precautionary statements | P201 Obtain special instructions before use. |
| | P202 Do not handle until all safety precautions have been read and understood. |
| | P273 Avoid release to the environment. |
| | P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. |
| | P308+P313 IF exposed or concerned: Get medical advice/ attention. |
| | P391 Collect spillage. |
| | P405 Store locked up. |
| P501 Dispose of contents/ container in accordance with national regulations. | |

Contains flumioxazin (ISO)

Other hazards

This product does not contain any substances classified as PBT (persistent, bioaccumulative and toxic) or vPvB (very persistent and very bioaccumulative).

SECTION 3: Composition and information on ingredients

Mixtures

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| Other, non-hazardous ingredients | 52% |
| CAS number: — | |
| flumioxazin (ISO) | 48 % |
| CAS number: 103361-09-7 | |

SECTION 4: First aid measures

Description of first aid measures

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| General information | Get medical attention if any discomfort continues. Show this Safety Data Sheet to the medical personnel. |
| Inhalation | Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Loosen tight clothing such as collar, tie or belt. Get medical attention if symptoms are severe or persist. |
| Ingestion | Rinse mouth thoroughly with water. Get medical advice/attention if you feel unwell. Do not induce vomiting unless under the direction of medical personnel. |
| Skin Contact | Rinse with water. |
| Eye contact | Remove any contact lenses and open eyelids wide apart. Rinse with water. Get medical attention if any discomfort continues. |
| Protection of first aiders | First aid personnel should wear appropriate protective equipment during any rescue. |

Most important symptoms and effects, both acute and delayed

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|----------------------------|---|
| General information | The severity of the symptoms described will vary dependent on the concentration and the length of exposure. |
| Inhalation | No specific symptoms known. |
| Ingestion | No specific symptoms known. |
| Skin contact | No specific symptoms known. |
| Eye contact | No specific symptoms known. May be slightly irritating to eyes. |

Indication of any immediate medical attention and special treatment needed

Notes for the doctor Treat symptomatically.

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SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing media The product is not flammable. Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. Use fire-extinguishing media suitable for the surrounding fire.

Unsuitable extinguishing media Do not use water jet as an extinguisher, as this will spread the fire.

Special hazards arising from the substance or mixture

Specific hazards Containers can burst violently or explode when heated, due to excessive pressure build-up.

Hazardous combustion products Thermal decomposition or combustion products may include the following substances: Harmful gases or vapours.

Advice for firefighters

Protective actions during firefighting Avoid breathing fire gases or vapours. Evacuate area. Keep upwind to avoid inhalation of gases, vapours, fumes and smoke. Ventilate closed spaces before entering them. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Cool containers exposed to flames with water until well after the fire is out. If a leak or spill has not ignited, use water spray to disperse vapours and protect men stopping the leak. Avoid discharge to the aquatic environment. Control run-off water by containing and keeping it out of sewers and watercourses. If risk of water pollution occurs, notify appropriate authorities.

Special protective equipment for firefighters Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Firefighter's clothing conforming to Australia/New Zealand Standards AS/NZS 4967 (for clothing) AS/NZS 1801 (for helmets), AS/NZS 4821 (for protective boots), AS/NZS 1801 (for protective gloves) will provide a basic level of protection for chemical incidents.

Hazchem Code 2Z

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions Wear protective clothing as described in Section 8 of this safety data sheet. No action shall be taken without appropriate training or involving any personal risk. Do not touch or walk into spilled material.

Environmental precautions

Environmental precautions Avoid discharge into drains or watercourses or onto the ground. Avoid discharge to the aquatic environment.

Methods and material for containment and cleaning up

Methods for cleaning up Wear protective clothing as described in Section 8 of this safety data sheet. Clear up spills immediately and dispose of waste safely. Small Spillages: Collect spillage. Large Spillages: Absorb spillage with non-combustible, absorbent material. The contaminated absorbent may pose the same hazard as the spilled material. Collect and place in suitable waste disposal containers and seal securely. Label the containers containing waste and contaminated materials and remove from the area as soon as possible. Flush contaminated area with plenty of water. Wash thoroughly after dealing with a spillage. Dangerous for the environment. Do not empty into drains. For waste disposal, see Section 13.

Reference to other sections

Reference to other sections For personal protection, see Section 8. See Section 11 for additional information on health hazards. See Section 12 for additional information on ecological hazards. For waste disposal, see Section 13.

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SECTION 7: Handling and storage, including how the chemical may be safely used

Precautions for safe handling

Usage precautions

Read and follow manufacturer's recommendations. Wear protective clothing as described in Section 8 of this safety data sheet. Keep away from food, drink and animal feeding stuffs. Handle all packages and containers carefully to minimise spills. Keep container tightly sealed when not in use. Avoid the formation of mists. May damage the unborn child. Pregnant or breastfeeding women should not work with this product if there is any risk of exposure. Avoid discharge to the aquatic environment. Do not handle until all safety precautions have been read and understood. Do not handle broken packages without protective equipment. Do not reuse empty containers.

Advice on general occupational hygiene

Wash promptly if skin becomes contaminated. Take off contaminated clothing and wash before reuse. Wash contaminated clothing before reuse.

Conditions for safe storage, including any incompatibilities

Storage precautions

Store away from incompatible materials (see Section 10). Store locked up. Keep only in the original container. Keep container tightly closed, in a cool, well ventilated place. Keep containers upright. Protect containers from damage.

Storage class

Miscellaneous hazardous material storage.

Specific end use(s)

Specific end use(s)

The identified uses for this product are detailed in Section 1.

SECTION 8: Exposure controls and personal protection

Control parameters

Occupational exposure limits

flumioxazin (ISO)

National exposure standard

No value assigned for this specific material by Safe Work Australia

Exposure controls

Protective equipment



Personal protection

Wear protective clothing.

Eye/face protection

When mixing and loading wear face shield or goggles.

Hand protection

Wear elbow-length chemical resistant gloves.

Other skin and body protection

Wear cotton overalls over normal clothing, buttoned to the neck and wrist and a washable hat.

Hygiene measures

Wash after use and before eating, smoking and using the toilet. Do not eat, drink or smoke when using this product.

Respiratory protection

No specific requirements are anticipated under normal conditions of use.

Environmental exposure controls

Keep container tightly sealed when not in use.

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SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

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| Appearance | white to off white emulsion |
| Colour | White/off-white. |
| pH | 5.5 - 7.5 |
| Relative density | 1.14 - 1.18 |
| Partition coefficient | log Kow 2.55 @ 20oC |

SECTION 10: Stability and reactivity

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| Reactivity | See the other subsections of this section for further details. |
| Stability | Stable at normal ambient temperatures and when used as recommended. Stable under the prescribed storage conditions. |
| Possibility of hazardous reactions | No potentially hazardous reactions known. |
| Conditions to avoid | There are no known conditions that are likely to result in a hazardous situation. |
| Materials to avoid | No specific material or group of materials is likely to react with the product to produce a hazardous situation. |
| Hazardous decomposition products | Does not decompose when used and stored as recommended. Thermal decomposition or combustion products may include the following substances: Harmful gases or vapours. |

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity - oral

Notes (oral LD₅₀) LD50 > 5000 mg/kg, Oral, Rat

Acute toxicity - dermal

Notes (dermal LD₅₀) LD50: >5000 mg/kg bw in female rats

Acute toxicity - inhalation

Notes (inhalation LC₅₀) LC50> 2.11 mg/L, Inhalation, Rat, (4hr)

Skin corrosion/irritation

Animal data Slightly irritating. (Rabbit)

Serious eye damage/irritation

Serious eye damage/irritation Slightly irritating. (Rabbit)

Respiratory sensitisation

Respiratory sensitisation Based on available data the classification criteria are not met.

Skin sensitisation

Skin sensitisation Not sensitising.

Germ cell mutagenicity

Genotoxicity - in vitro Based on available data the classification criteria are not met.

Carcinogenicity

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| | |
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| Carcinogenicity | Based on available data the classification criteria are not met. |
| IARC carcinogenicity | None of the ingredients are listed or exempt. |
| <u>Reproductive toxicity</u> | |
| Reproductive toxicity - fertility | Based on available data the classification criteria are not met. |
| Reproductive toxicity - development | May damage the unborn child. |
| <u>Specific target organ toxicity - single exposure</u> | |
| STOT - single exposure | Not classified as a specific target organ toxicant after a single exposure. |
| <u>Specific target organ toxicity - repeated exposure</u> | |
| STOT - repeated exposure | Not classified as a specific target organ toxicant after repeated exposure. |
| <u>Aspiration hazard</u> | |
| Aspiration hazard | Based on available data the classification criteria are not met. |
| General information | |
| | Avoid contact during pregnancy/while nursing. The severity of the symptoms described will vary dependent on the concentration and the length of exposure. |
| Inhalation | No specific symptoms known. |
| Ingestion | No specific symptoms known. |
| Skin Contact | No specific symptoms known. |
| Eye contact | No specific symptoms known. |
| Route of exposure | Ingestion Inhalation Skin and/or eye contact |
| Target Organs | No specific target organs known. |

SECTION 12: Ecological information

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| Toxicity | Aquatic Acute 1 - H400 Very toxic to aquatic life. Aquatic Chronic 1 - H410 Very toxic to aquatic life with long lasting effects. |
| <u>Acute aquatic toxicity</u> | |
| Acute toxicity - fish | Rainbow trout - LC50 2.3 mg ac/L Technical active 96-h flow-through, mean measured |
| Acute toxicity - aquatic invertebrates | Mysid shrimp - LC50 0.23 mg ac/L Technical active 96h flow through, mean measured Waterflea EC50 5.9 mg ac/L Technical active 48h flow-through, mean measured |
| Acute toxicity - aquatic plants | Green alga - EC50 0.0011 mg ac/L Technical active 120h static, initial measured |
| Acute toxicity - microorganisms | LC50corr >491 mg ac/kg dry soil Technical active 14d artificial soil, 10% peat Eisenia fetida |

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Acute toxicity - terrestrial

Oral LD50, 48 hour: >100 (Technical) µg a.i./bee, Apis Mellifera (Honeybee)
 Contact LD50, 48 hour: >105 (Technical) µg a.i./bee, Apis Mellifera (Honeybee)
 Oral LD50, 14 days: >2250 (Technical) mg ai/kg bw, Colinus Virginianus (Bobwhite Quail)
 Dietary LC50, 8 day: >5620 (Technical) ppm, Anas Platyrhynchos (Mallard duck)
 Reproduction study, 6 weeks: 1000 (Technical) ppm, Colinus Virginianus (Bobwhite Quail)
 Reproduction study, 21 weeks: 500 (Technical) ppm, Colinus Virginianus (Bobwhite Quail)

Chronic aquatic toxicity

Chronic toxicity - fish early life stage

NOEC 0.0077 mg ac/L
 (reduced length and weight at 0.016 mg ac/L)
 Technical active
 87d ELS flow-through, mean measured
 Oncorhynchus mykiss

NOEC 0.37 mg ac/L
 (reduced weight & food consumption at 0.61 mg ac/L)
 Technical active
 21d flow-through, mean measured
 Oncorhynchus mykiss

Chronic toxicity - aquatic invertebrates

NOEC 0.057 mg ac/L
 (increased mortality at 0.11 mg ac/L)
 Technical active
 21d flow-through, mean measured.
 Daphnia magna

NOEC 0.10 mg ac/L
 (reduced growth at 0.20 mg ac/L)
 Technical active
 21d semi-static, nominal
 Daphnia magna

Toxicity to soil

NOEC 1.6 mg ac/kg dry soil
 (<25% effect at highest test concentration)
 Nitrogen and carbon mineralisation

Persistence and degradability

Persistence and degradability The degradability of the product is not known.

Bioaccumulative potential

Bioaccumulative Potential No data available on bioaccumulation.

Partition coefficient

log Kow 2.55 @ 20oC

Mobility in soil

Mobility

No data available.

Adsorption/desorption coefficient

Mean Koc 889 mL/g Technical

Henry's law constant

1.45 × 10⁻¹ Pa m³/mol @ 20-22oC Technical

Other adverse effects

Other adverse effects

None known.

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SECTION 13: Disposal considerations

Waste treatment methods

General information

The generation of waste should be minimised or avoided wherever possible. Reuse or recycle products wherever possible. This material and its container must be disposed of in a safe way. When handling waste, the safety precautions applying to handling of the product should be considered. Care should be taken when handling emptied containers that have not been thoroughly cleaned or rinsed out. Empty containers or liners may retain some product residues and hence be potentially hazardous.

Disposal methods

Triple or preferably pressure rinse containers before disposal. Add rinsings to spray tank. DO NOT dispose of undiluted chemicals on site. If recycling, replace cap and return clean containers to recycler or designated collection point.

If not recycling, break, crush, or puncture and deliver empty packaging for appropriate disposal to an approved waste management facility. If an approved waste management facility is not available bury the empty packaging 500 mm below the surface in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots, in compliance with relevant Local, State or Territory government regulations. DO NOT burn empty containers or product.

SECTION 14: Transport information

General

Environmental Hazardous Substances meeting the description of UN 3077 or UN 3082 are not subject to this Code when transported by road or rail in; (a) packages that do not incorporate a receptacle exceeding 500 kg (L); or (b) IBCs. (ADG Special Provision AU01) Not a dangerous good for transport by Road and Rail according to ADG 7 code

UN number

3082

UN proper shipping name

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

Transport hazard class(es)

9

Packing group

III

Special precautions for user

Hazchem Code 2Z

SECTION 15: Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture

National regulations APVMA Approval Number: 92955

Schedule (SUSMP) Schedule 7. Dangerous Poison.

Inventories

Australia - AIC

None of the ingredients are listed or exempt.

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SECTION 16: Any other relevant information

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| Abbreviations and acronyms used in the safety data sheet | <p>ADG: Australian dangerous goods code</p> <p>IATA: International air transport association.</p> <p>ICAO: Technical instructions for the safe transport of dangerous goods by air.</p> <p>IMDG: International maritime dangerous goods.</p> <p>CAS: Chemical abstracts service.</p> <p>ATE: Acute toxicity estimate.</p> <p>LC₅₀: Lethal concentration to 50 % of a test population.</p> <p>LD₅₀: Lethal dose to 50% of a test population (median lethal dose).</p> <p>EC₅₀: 50% of maximal effective concentration.</p> <p>PBT: Persistent, bioaccumulative and toxic substance.</p> <p>vPvB: Very persistent and very bioaccumulative.</p> |
| Classification abbreviations and acronyms | <p>Repr. = Reproductive toxicity</p> <p>Aquatic Acute = Hazardous to the aquatic environment (acute)</p> <p>Aquatic Chronic = Hazardous to the aquatic environment (chronic)</p> |
| Training advice | Only trained personnel should use this material. |
| Revision date | 8/05/2023 |
| Revision | 4 |
| Supersedes date | 8/05/2023 |
| SDS No. | 4938 |
| Hazard statements in full | <p>H361d Suspected of damaging the unborn child.</p> <p>H400 Very toxic to aquatic life.</p> <p>H410 Very toxic to aquatic life with long lasting effects.</p> |

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.