

Safety data sheet

BASF Safety Data Sheet
Date / Revised: 07.04.2022
Product: **ARIETTA**[®]

(Ref. 30265086/SDS_CPA_NZ/EN; Version 4.0)

1. Substance/preparation and manufacturer/supplier identification

ARIETTA[®]

uses: crop protection product, herbicide

Manufacturer/supplier of the safety data sheet:

BASF New Zealand Ltd.
5E City Works Depot
77 Cook Street
Auckland Central, Auckland 1010
NEW ZEALAND
Telephone: +64 9 255-4300

Emergency information:

National Poisons Centre: 0800 764 766
BASF Emergency Advice Number: 0800 944 955 (24-hour advice in an emergency only)
BASF Emergency Advice Number: +61 3 8855 6666 (If calling from outside New Zealand)

2. Hazards identification

Classification of the substance or mixture

Repr. 2
STOT Rep. Exp. 1
Aquatic Acute 1
Aquatic Chronic 1
Hazardous to soil organisms
Hazardous to terrestrial vertebrates

Label elements and precautionary statements

Pictogram:



Signal Word:
 Danger

Hazard Statements:

H361 Suspected of damaging fertility or the unborn child
 H372 Causes damage to organs <or state all organs affected
 H400 Very toxic to aquatic life.
 H412 Very toxic to aquatic life with long lasting effects.

Precautionary Statement (Prevention):

P101 If medical advice is needed, have product container or label at hand.
 P102 Keep out of reach of children.
 P103 Read carefully and follow all instructions.
 P201 Obtain special instructions before use.
 P202 Do not handle until all safety precautions have been read and understood.
 P260: Do not breathe dust/fume/gas/mist/vapours/spray
 P264: Wash exposed body parts thoroughly after handling.
 P270: Do not eat, drink or smoke when using this product.
 P281 Use personal protective equipment as required.

Precautionary Statements (Response):

P308 + P313 IF exposed or concerned: Get medical attention.
 P314: Get medical advice/attention if you feel unwell
 P391 Collect spillage.

Precautionary Statements (Storage):

P405 Store locked up.

Other hazards which do not result in classification:

See section 12 - Results of PBT and vPvB assessment.

If applicable information is provided in this section on other hazards which do not result in classification, but which may contribute to the overall hazards of the substance or mixture.

3. Composition/information on ingredients

Chemical nature

Crop protection product, herbicide, suspension concentrate (SC).

Hazardous ingredients

Topramezone
 Content (W/W): 29.7 %
 CAS Number: 210631-68-8

Repr.: Cat. 1B (unborn child)
 Aquatic Acute: Cat. 1
 Aquatic Chronic: Cat. 1
 M-factor acute: 1
 M-factor chronic: 100

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Benzenesulfonic acid, hydroxy-,
polymer with formaldehyde,
phenol and urea, sodium salt
Content (W/W): < 3 %
CAS Number: 102980-04-1

Eye Dam./Irrit.: Cat. 2A
Aquatic Acute: Cat. 3
Aquatic Chronic: Cat. 3

propane-1,2-diol
Content (W/W): < 10 %
CAS Number: 57-55-6

4. First-aid measures

General advice:

First aid personnel should pay attention to their own safety. If the patient is likely to become unconscious, place and transport in stable sideways position (recovery position). Immediately remove contaminated clothing.

If inhaled:

Keep patient calm, remove to fresh air, seek medical attention.

On skin contact:

Wash thoroughly with soap and water, seek medical attention.

On contact with eyes:

Wash affected eyes for at least 15 minutes under running water with eyelids held open.

On ingestion:

Rinse mouth immediately and then drink plenty of water, induce vomiting, seek medical attention.

Note to physician:

Symptoms: Information, i.e. additional information on symptoms and effects may be included in the GHS labeling phrases available in Section 2 and in the Toxicological assessments available in Section 11., (Further) symptoms and / or effects are not known so far

Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote.

5. Fire-fighting measures

Suitable extinguishing media:

Water spray, foam, dry powder, carbon dioxide.

Unsuitable extinguishing media for safety reasons:

water jet

Specific hazards:

Carbon monoxide, Carbon dioxide, nitrogen oxides, sulphur oxides.

The substances/groups of substances mentioned can be released in case of fire.

Special protective equipment:

Wear self-contained breathing apparatus and chemical-protective clothing.

Further information:

In case of fire and/or explosion do not breathe fumes. Keep containers cool by spraying with water if exposed to fire. Collect contaminated extinguishing water separately, do not allow to reach sewage

or effluent systems. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

6. Accidental release measures

Personal precautions:

Do not breathe vapour/spray. Use personal protective clothing. Avoid contact with the skin, eyes and clothing.

Environmental precautions:

Do not discharge into drains/surface waters/groundwater. Do not discharge into the subsoil/soil.

Methods for cleaning up or taking up:

For small amounts: Pick up with suitable absorbent material (e.g. sand, sawdust, general-purpose binder, kieselguhr).

For large amounts: Dike spillage. Pump off product.

Dispose of absorbed material in accordance with regulations. Collect waste in suitable containers, which can be labeled and sealed. Clean contaminated floors and objects thoroughly with water and detergents, observing environmental regulations. Wear suitable protective equipment.

7: Handling and storage

Handling:

No special measures necessary if stored and handled correctly. Ensure thorough ventilation of stores and work areas. When using do not eat, drink or smoke. Hands and/or face should be washed before breaks and at the end of the shift. Remove contaminated clothing and protective equipment before entering eating areas.

Protection against fire and explosion:

No special precautions necessary. The substance/product is non-combustible. Product is not explosive.

Storage:

Segregate from foods and animal feeds.

Further information on storage conditions: Keep away from heat. Protect from direct sunlight.

Storage stability:

Storage duration: 60 Months

Protect from temperatures below: 0 °C

The product can crystallize below the limit temperature.

Protect from temperatures above: 40 °C

Changes in the properties of the product may occur if substance/product is stored above indicated temperature for extended periods of time.

8. Exposure controls/personal protection

Components with occupational exposure limits

propane-1,2-diol, 57-55-6;

TWA value 10 mg/m³ (OEL (NZ)), Particulate

TWA value 474 mg/m³ ; 150 ppm (OEL (NZ)), Vapor and particulates

Personal protective equipment

Respiratory protection:

Suitable respiratory protection for lower concentrations or short-term effect: Combination filter for gases/vapours of organic, inorganic, acid inorganic, alkaline compounds and toxic particles (e.g. EN

14387 Type ABEK-P3).

Hand protection:

Suitable chemical resistant safety gloves (EN 374) also with prolonged, direct contact (Recommended: Protective index 6, corresponding > 480 minutes of permeation time according to EN 374): e.g. nitrile rubber (0.4 mm), chloroprene rubber (0.5 mm), butyl rubber (0.7 mm) etc.

Eye protection:

Safety glasses with side-shields (frame goggles) (e.g. EN 166).

Body protection:

Body protection must be chosen depending on activity and possible exposure, e.g. apron, protecting boots, chemical-protection suit (according to EN 14605 in case of splashes or EN ISO 13982 in case of dust).

General safety and hygiene measures

The statements on personal protective equipment in the instructions for use apply when handling crop protection agents in final-consumer packing. Wearing of closed work clothing is recommended. Store work clothing separately. Keep away from food, drink and animal feeding stuffs.

9. Physical and chemical properties

Form:	liquid
Colour:	off-white
Odour:	aromatic
Odour threshold:	Not determined due to potential health hazard by inhalation.
pH value:	approx. 2.5 - 4.5 (CIPAC standard water D, 1 %(m), 20 °C)
crystallization temperature:	approx. -4 °C
Boiling point:	approx. 100 °C
Flash point:	No flash point - Measurement made up to the boiling point.
Evaporation rate:	not applicable
Flammability (solid/gas):	Study does not need to be conducted.
Lower explosion limit:	As a result of our experience with this product and our knowledge of its composition we do not expect any hazard as long as the product is used appropriately and in accordance with the intended use.
Upper explosion limit:	As a result of our experience with this product and our knowledge of its composition we do not expect any hazard as long as the product is used appropriately and in accordance with the intended use.
Ignition temperature:	425 °C (Directive 92/69/EEC, A.15)
Thermal decomposition:	210 °C , 330 kJ/kg (Not a substance liable to self-decomposition according to UN transport regulations, class 4.1.)
Explosion hazard:	not explosive
Fire promoting properties:	not fire-propagating
Vapour pressure:	approx. 23.3 hPa (20 °C) Information applies to the solvent.
Density:	approx. 1.12 g/cm ³ (20 °C)
Relative vapour density (air):	not applicable
Solubility in water:	dispersible
Partitioning coefficient n-octanol/water (log Pow):	not applicable
Viscosity, dynamic:	approx. 78 mPa.s (20 °C, 100 1/s)

Other Information:

If necessary, information on other physical and chemical parameters is indicated in this section.

10. Stability and reactivity

Conditions to avoid:
See SDS section 7 - Handling and storage.

Thermal decomposition: 210 °C, 330 kJ/kg

Thermal decomposition: Not a substance liable to self-decomposition according to UN transport regulations, class 4.1.

Substances to avoid:
strong acids, strong bases, strong oxidizing agents

Hazardous reactions:
No hazardous reactions if stored and handled as prescribed/indicated.

Hazardous decomposition products:
No hazardous decomposition products if stored and handled as prescribed/indicated.

11. Toxicological information

Acute toxicity

Assessment of acute toxicity:
Virtually nontoxic after a single ingestion. Virtually nontoxic by inhalation. Virtually nontoxic after a single skin contact. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Experimental/calculated data:
LD50 rat (oral): > 2,000 mg/kg (OECD Guideline 423)
No mortality was observed.

LC50 rat (by inhalation): > 5,8 mg/l 4 h (OECD Guideline 403)
No mortality was observed. An aerosol was tested.

LD50 rat (dermal): > 4,000 mg/kg (OECD Guideline 402)
No mortality was observed.

Irritation

Assessment of irritating effects:
Not irritating to the eyes. Not irritating to the skin. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Experimental/calculated data:
Skin corrosion/irritation rabbit: non-irritant (OECD Guideline 404)
Serious eye damage/irritation rabbit: non-irritant (OECD Guideline 405)

Respiratory/Skin sensitization

The product has not been tested. The statement has been derived from substances/products of a similar structure or composition. There is no evidence of a skin-sensitizing potential.

Experimental/calculated data:
Mouse Local Lymph Node Assay (LLNA) mouse: Skin sensitizing effects were not observed in animal studies. (OECD Guideline 429).

Germ cell mutagenicity

Assessment of mutagenicity:

The product has not been tested. The statement has been derived from the properties of the individual components. Mutagenicity tests revealed no genotoxic potential.

Carcinogenicity

Assessment of carcinogenicity:

The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: topramezone (ISO); Methanone, [3-(4,5-dihydro-3-isoxazolyl)-2-methyl-4-(methylsulfonyl)phenyl](5-hydroxy-1-methyl-1H-pyrazol-4-yl)-

Assessment of carcinogenicity:

When given in high doses, the substance was carcinogenic in animal studies. Based on its mechanism of action, a carcinogenic potential is not expected after exposure to low doses.

Reproductive toxicity

Assessment of reproduction toxicity:

The product has not been tested. The statement has been derived from the properties of the individual components. The results of animal studies gave no indication of a fertility impairing effect.

Developmental toxicity

Assessment of teratogenicity:

The product has not been tested. The statement has been derived from the properties of the individual components. Animal studies gave no indication of a developmental toxic effect at doses that were not toxic to the parental animals.

Information on: topramezone (ISO); Methanone, [3-(4,5-dihydro-3-isoxazolyl)-2-methyl-4-(methylsulfonyl)phenyl](5-hydroxy-1-methyl-1H-pyrazol-4-yl)-

Assessment of teratogenicity:

May cause harm to the unborn child.

Specific target organ toxicity (single exposure)

Assessment of STOT single:

Based on the available information there is no specific target organ toxicity to be expected after a single exposure.

Remarks: The product has not been tested. The statement has been derived from the properties of the individual components.

Repeated dose toxicity and Specific target organ toxicity (repeated exposure)

Assessment of repeated dose toxicity:

The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: topramezone (ISO); Methanone, [3-(4,5-dihydro-3-isoxazolyl)-2-methyl-4-(methylsulfonyl)phenyl](5-hydroxy-1-methyl-1H-pyrazol-4-yl)-

Assessment of repeated dose toxicity:

Adaptive effects were observed after repeated exposure in animal studies.

Aspiration hazard

No aspiration hazard expected.

The product has not been tested. The statement has been derived from the properties of the individual components.

Other relevant toxicity information

Misuse can be harmful to health.

12. Ecological information

Ecotoxicity

Assessment of aquatic toxicity:

Very toxic to aquatic life with long lasting effects.

The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Toxicity to fish:

LC50 (96 h) 8,71 mg/l, *Oncorhynchus mykiss*

Aquatic invertebrates:

EC50 (48 h) 12,1 mg/l, *Daphnia magna*

Aquatic plants:

EC50 (7 d) > 0,064 mg/l (growth rate), *Lemna gibba* (OECD guideline 221)

EC50 (7 d) 0,0008 mg/l (growth rate), *Lemna gibba* (OECD guideline 221)

Chronic toxicity to aquatic invertebrates:

No observed effect concentration (35 d) 0,12 mg/l, *Mysidopsis bahia*

Mobility

Assessment transport between environmental compartments:

The product has not been tested. The statement has been derived from the properties of the individual components

Information on: Topramezone

Assessment transport between environmental compartments:

Following exposure to soil, the product trickles away and can - dependant on degradation - be transported to deeper soil areas with larger water loads.

Persistence and degradability

Assessment biodegradation and elimination (H₂O):

The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: Topramezone

Assessment biodegradation and elimination (H₂O):

Not readily biodegradable (by OECD criteria).

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Bioaccumulation potential

Assessment bioaccumulation potential:

The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: Topramezone

Bioaccumulation potential:

Bioconcentration factor: 0.69 (42 d), *Lepomis macrochirus* (OPPTS 850.1730 (EPA Guideline))

Does not significantly accumulate in organisms.

Additional information

Other ecotoxicological advice:

Do not discharge product into the environment without control.

13. Disposal considerations

Container:

Triple rinse empty container and add residue to the spray tank. Recycle the rinsed container through Agrecovery (0800 247 326, www.agrecovery.co.nz).

Contaminated packaging:

Contaminated packaging should be emptied as far as possible and buried in an approved landfill.

Product:

Dispose of this product only by using according to the label, or at an approved landfill, or at an approved facility. DO NOT burn product. DO NOT contaminate water with product or used container.

14. Transport information

Commercial transport:

Packing group:	III
UN number:	UN 3082
Transport hazard class(es):	9, EHSM
UN proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains TOPRAMEZONE)
Marine pollutant:	YES
Hazchem Code:	3Z
IERG Number:	47

Public transport:

DO NOT carry this product on a passenger service vehicle.

Further information

Product may be shipped as non-hazardous in suitable packages containing a net quantity of 5 L or less under the provisions of various regulatory agencies: ADR, RID, ADN: Special Provision 375; IMDG: 2.10.2.7; IATA: A197; TDG: Special Provision 99(2); 49CFR: §171.4 (c) (2) and also the Special Provision 375 in Appendix B which is regulated in China "Regulations Concerning Road Transportation of Dangerous Goods Part 3: Index of dangerous goods name and transportation requirements" (JT/T 617.3)

15. Regulatory information

For the user of this plant-protective product:

To avoid risks to man and the environment, comply with the instructions for use.

NZ Regulations

Approved pursuant to the HSNO Act 1996, Code HSR100903.

See www.epa.govt.nz for approval conditions.

Registered pursuant to the ACVM Act 1997, No. P008825.

See www.foodsafety.govt.nz for registration conditions.

Qualifications required: any person mixing, loading, or handling this product must be a qualified person. Refer to the product label for handling precautions and directions for use.

Certified Handler: not required

Tracking: not required

Record keeping: records of use must be kept if more than 3 kg is applied within 24 hours.

NOTE: Storage, application and record keeping must be as described in the current version of the New Zealand Standard for the Management of Agrichemicals NZS8409.

16. Other Information

For proper and safe use of this product, please refer to the approval conditions laid down on the product label.

The data contained in this safety data sheet are based on our current knowledge and experience and describe the product only with regard to safety requirements. This safety data sheet is neither a Certificate of Analysis (CoA) nor technical data sheet and shall not be mistaken for a specification agreement. Identified uses in this safety data sheet do neither represent an agreement on the corresponding contractual quality of the substance/mixture nor a contractually designated use. It is the responsibility of the recipient of the product to ensure any proprietary rights and existing laws and legislation are observed.

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