We create chemistry

Safety data sheet

1. Substance/preparation and manufacturer/supplier identification

Product name:
Navicon® Intrinsic Fungicide

Use: crop protection product, fungicide

Manufacturer/supplier:
BASF Australia Limited (ABN 62 008 437 867)
Level 23, 40 City Road, Southbank
Victoria 3006, AUSTRALIA
Telephone: +61 3 8855-6600

Emergency information:
BASF Emergency Advice Number: 1800 803 440 (24h) [within Australia]
BASF Emergency Advice Number: + 61 3 8855 6666 [outside Australia]

2. Hazard identification

Classification of the substance and mixture:
Acute toxicity: Cat.4 (oral)
Acute toxicity: Cat.4 (Inhalation - mist)
Skin irritation: Cat.2
Skin sensitization: Cat.1B
Reproductive toxicity: Cat.2 (unborn child)
Specific target organ toxicity — single exposure: Cat.3 (irritating to respiratory system)
Specific target organ toxicity — repeated exposure: Cat.2
Hazardous to the aquatic environment - acute: Cat.1
Hazardous to the aquatic environment - chronic: Cat.1

Label elements and precautionary statement:

Pictogram:



Signal Word:
Warning

Hazard Statement:

H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H373	May cause damage to organs through prolonged or repeated exposure.
H335	May cause respiratory irritation.
H361	Suspected of damaging the unborn child.
H302 + H332	Harmful if swallowed or if inhaled.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

Precautionary Statement:

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.

Precautionary Statements (Prevention):

P280	Wear protective gloves, protective clothing and eye protection or face protection.
P271	Use only outdoors or in a well-ventilated area.
P260	Do not breathe dust/gas/mist/vapours.
P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P272	Contaminated work clothing should not be allowed out of the workplace.
P270	Do not eat, drink or smoke when using this product.
P264	Wash contaminated body parts thoroughly after handling.

Precautionary Statements (Response):

P312	Call a POISON CENTER or physician if you feel unwell.
P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P308 + P313	IF exposed or concerned: Get medical advice/attention.
P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.
P330	Rinse mouth.
P391	Collect spillage.
P362 + P364	Take off contaminated clothing and wash it before reuse.

Precautionary Statements (Storage):

P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.

Precautionary Statements (Disposal):

P501	Dispose of contents and container to hazardous or special waste collection point.

Other hazards which do not result in classification:

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.

May produce an allergic reaction. Contains:
1,2-benzisothiazol-3(2H)-one, 2-methyl-2H-isothiazol-3-one

3. Composition/information on ingredients

Chemical nature

Substance nature: mixture

crop protection product, fungicide, suspension concentrate (SC)

Hazardous ingredients

1H-1,2,4-Triazole-1-ethanol, α-[4-(4-chlorophenoxy)-2-(trifluoromethyl)phenyl]-α-methyl-
Content (W/W): 17.56 %
CAS Number: 1417782-03-6
Skin Sens.: Cat. 1
Aquatic Acute: Cat. 1
Aquatic Chronic: Cat. 1
M-factor acute: 1
M-factor chronic: 1

Carbamic acid, [2-[[[1-(4-chlorophenyl)-1H-pyrazol-3-yl]oxy]methyl]phenyl]methoxy-, methyl ester
Content (W/W): 17.56 %
CAS Number: 175013-18-0
Acute Tox.: Cat. 3 (Inhalation - mist)
Acute Tox.: Cat. 4 (oral)
Skin Irrit.: Cat. 2
Repr.: Cat. 2 (unborn child)
STOT SE: Cat. 3 (irr. to respiratory syst.)
STOT RE (Liver, Nasal cavity, Gastrointestinal tract): Cat. 2
Aquatic Acute: Cat. 1
Aquatic Chronic: Cat. 1
M-factor acute: 100
M-factor chronic: 100

Benzenesulfonic acid, hydroxy-, polymer with formaldehyde, phenol and urea, sodium salt
Content (W/W): < 5 %
CAS Number: 102980-04-1
Eye Dam./Irrit.: Cat. 2A
Aquatic Acute: Cat. 3
Aquatic Chronic: Cat. 3

Residues (petroleum), catalytic reformer fractionator, sulfonated,polymers with formaldehyde, sodium salts
Content (W/W): < 5 %
CAS Number: 68425-94-5
Eye Dam./Irrit.: Cat. 2A
Aquatic Acute: Cat. 3
Aquatic Chronic: Cat. 3

1,2-benzisothiazol-3(2H)-one

Content (W/W): < 0.036 %
CAS Number: 2634-33-5

Acute Tox.: Cat. 2 (Inhalation - dust)
Acute Tox.: Cat. 4 (oral)
Skin Irrit.: Cat. 2
Eye Dam.: Cat. 1
Skin Sens.: Cat. 1A
Aquatic Acute: Cat. 1
Aquatic Chronic: Cat. 1
M-factor acute: 1
M-factor chronic: 1

2-methyl-2H-isothiazol-3-one
Content (W/W): < 0.02 %
CAS Number: 2682-20-4

Acute Tox.: Cat. 2 (Inhalation - dust)
Acute Tox.: Cat. 3 (oral)
Acute Tox.: Cat. 3 (dermal)
Skin Corr.: Cat. 1B
Eye Dam.: Cat. 1
Skin Sens.: Cat. 1A
Aquatic Acute: Cat. 1
Aquatic Chronic: Cat. 1
M-factor acute: 10
M-factor chronic: 1

propane-1,2-diol
Content (W/W): < 5 %
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

On contact with eyes:
Wash affected eyes for at least 15 minutes under running water with eyelids held open, consult an eye specialist.

On ingestion:
Immediately rinse mouth and then drink 200-300 ml of water, 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

Hazards: 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, dry powder, foam, carbon dioxide

Specific hazards:
carbon monoxide, carbon dioxide, hydrogen chloride, hydrogen fluoride, nitrogen oxides, halogenated compounds, phosphorus oxides, sulfur 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:
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. In case of fire and/or explosion do not breathe fumes. Keep containers cool by spraying with water if exposed to fire.

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

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.

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
Changes in the properties of the product may occur if substance/product is stored below indicated temperature for extended periods of time.
Protect from temperatures above: 45 °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 and personal protection

Components with occupational exposure limits

propane-1,2-diol, 57-55-6;
TWA value 474 mg/m3 ; 150 ppm (AU NOEL), Total vapour and particulates
TWA value 10 mg/m3 (AU NOEL), Particulate
TWA value 50 mg/m3 (AU OEL), Vapor and particulates

Pyraclostrobin, 175013-18-0;
TWA value 0.13 mg/m3 (BASF recomm. occupational exposure limit)

1H-1,2,4-Triazole-1-ethanol, α-[4-(4-chlorophenoxy)-2-(trifluoromethyl)phenyl]-α-methyl-, 1417782-03-6;
TWA value 0.68 mg/m3 (BASF recomm. occupational exposure limit)

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 ISO 374-1) also with prolonged, direct contact (Recommended: Protective index 6, corresponding > 480 minutes of permeation time according to EN ISO 374-1): 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:	milky white	
Odour:	odourless	
Odour threshold:	Not determined since harmful by inhalation.	
pH value:	approx. 5.5 - 7.5 (1 %(m), 20 °C)	
Melting point:	approx. 0 °C Information applies to the solvent.	
Boiling point:	approx. 72 °C	
Flash point:	No flash point - Measurement made up to the boiling point.	
Flammability (solid/gas):	not flammable	
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:	> 660 °C	
Thermal decomposition:	145 °C , 130 kJ/kg (onset temperature)	(DSC (OECD 113))
	320 °C , 170 kJ/kg (onset temperature)	(DSC (OECD 113))

	Not a substance liable to self-decomposition according to UN transport regulations, class 4.1.	
SADT:	> 75 °C	
Explosion hazard:	Based on the chemical structure there is no indication of explosive properties.	
Fire promoting properties:	Based on its structural properties the product is not classified as oxidizing.	
Vapour pressure:	approx. 23.4 hPa (20 °C) Information applies to the solvent.	
Density:	approx. 1.14 g/cm3 (20 °C)	
Relative vapour density (air):	not determined	
Solubility in water:	dispersible	
Partitioning coefficient n-octanol/water (log Pow):	not applicable for mixtures	
Viscosity, dynamic:	approx. 89.4 mPa.s (20 °C, 100 1/s)	
Viscosity, kinematic:	approx. 78.4 mm2/s (20 °C)	(calculated (from dynamic viscosity))

Particle characteristics

Particle size distribution: The substance / product is marketed or used in a non solid or granular form. -

10. Stability and Reactivity

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

Thermal decomposition:	145 °C, 130 kJ/kg (DSC (OECD 113)) (onset temperature)
Thermal decomposition:	320 °C, 170 kJ/kg (DSC (OECD 113)) (onset temperature)
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.

Chemical stability:
The product is stable if stored and handled as prescribed/indicated.

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

11. Toxicological Information

Routes of exposure

Acute oral toxicity

Experimental/calculated data:
LD50rat (oral): > 500 - < 2,000 mg/kg (OECD Guideline 423)

Acute inhalation toxicity

LC50 rat (by inhalation): > 4.303 mg/l 4 h (OECD Guideline 403)
Highest concentration technically achievable. An aerosol was tested.

Acute dermal toxicity

LD50 rat (dermal): > 5,000 mg/kg (OECD Guideline 402)
No mortality was observed.

Assessment of acute toxicity

Of moderate toxicity after single ingestion. Of moderate toxicity after short-term inhalation. Virtually nontoxic after a single skin contact.

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

Irritation

Assessment of irritating effects:
Skin contact causes irritation. Not irritating to the eyes.

Experimental/calculated data:
Skin corrosion/irritation rabbit: Irritant. (OECD Guideline 404)

Serious eye damage/irritation rabbit: non-irritant (OECD Guideline 405)

Respiratory/Skin sensitization

Assessment of sensitization:
Sensitization after skin contact possible.

Experimental/calculated data:
Mouse Local Lymph Node Assay (LLNA) mouse: skin sensitizing (OECD Guideline 429)

Buehler test guinea pig: Non-sensitizing. (OECD Guideline 406)

Germ cell mutagenicity

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

Carcinogenicity

Assessment of carcinogenicity:
The results of various animal studies gave no indication of a carcinogenic effect. The product has not been tested. The statement has been derived from the properties of the individual components.

Reproductive toxicity

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

Developmental toxicity

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

Information on: pyraclostrobin (ISO); methyl N-{2-[1-(4-chlorophenyl)-1H-pyrazol-3-yloxymethyl]phenyl}(N-methoxy)carbamate
Assessment of teratogenicity:
Indications of possible developmental toxicity/teratogenicity were seen in animal studies.

Specific target organ toxicity (single exposure)

Causes temporary irritation of the respiratory tract.

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: (2RS)-2-[4-(4-chlorophenoxy)-2-(trifluoromethyl)phenyl]-1-(1H-1,2,4-triazol-1-yl)propan-2-ol; mefentrifluconazole
Assessment of repeated dose toxicity:
Repeated oral exposure to large quantities may affect certain organs. Liver Based on available data, the classification criteria are not met.

Information on: pyraclostrobin (ISO); methyl N-{2-[1-(4-chlorophenyl)-1H-pyrazol-3-yloxymethyl]phenyl}(N-methoxy)carbamate
Assessment of repeated dose toxicity:
Repeated exposure may affect certain organs. Target organs: Liver, gastrointestinal tract and nasal cavity
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Aspiration hazard

not applicable

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.

Toxicity to fish:
LC50 (96 h) 0.102 mg/l, Pimephales promelas

Aquatic invertebrates:
EC50 (48 h) 0.06 mg/l, Daphnia magna

Aquatic plants:
EC50 (72 h) 5.799 mg/l (growth rate), Pseudokirchneriella subcapitata

EC10 (72 h) 0.991 mg/l (growth rate), Pseudokirchneriella subcapitata

Information on: (2RS)-2-[4-(4-chlorophenoxy)-2-(trifluoromethyl)phenyl]-1-(1H-1,2,4-triazol-1-yl)propan-2-ol; mefentrifluconazole
Chronic toxicity to fish:
No observed effect concentration (36 d) 0.027 mg/l, Danio rerio

Information on: pyraclostrobin (ISO); methyl N-{2-[1-(4-chlorophenyl)-1H-pyrazol-3-yloxymethyl]phenyl}(N-methoxy)carbamate
Chronic toxicity to fish:
No observed effect concentration (98 d) approx. 0.00235 mg/l, Oncorhynchus mykiss (OECD Guideline 210, Flow through.)

Information on: (2RS)-2-[4-(4-chlorophenoxy)-2-(trifluoromethyl)phenyl]-1-(1H-1,2,4-triazol-1-yl)propan-2-ol; mefentrifluconazole
Chronic toxicity to aquatic invertebrates:
No observed effect concentration (21 d), 0.01 mg/l, Daphnia magna

EC10 (21 d), 0.0175 mg/l, Daphnia magna

Information on: pyraclostrobin (ISO); methyl N-{2-[1-(4-chlorophenyl)-1H-pyrazol-3-yloxymethyl]phenyl}(N-methoxy)carbamate
Chronic toxicity to aquatic invertebrates:
No observed effect concentration (21 d), 0.004 mg/l, Daphnia magna (OECD Guideline 202, part 2, semistatic)
The details of the toxic effect relate to the nominal concentration.

No observed effect concentration (31 d), 0.000365 mg/l, Mysidopsis bahia
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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: (2RS)-2-[4-(4-chlorophenoxy)-2-(trifluoromethyl)phenyl]-1-(1H-1,2,4-triazol-1-yl)propan-2-ol; mefentrifluconazole
Assessment transport between environmental compartments:
Following exposure to soil, adsorption to solid soil particles is probable, therefore contamination of groundwater is not expected.

Information on: pyraclostrobin (ISO); methyl N-{2-[1-(4-chlorophenyl)-1H-pyrazol-3-yloxymethyl]phenyl}(N-methoxy)carbamate
Assessment transport between environmental compartments:
Following exposure to soil, adsorption to solid soil particles is probable, therefore contamination of groundwater is not expected.

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: (2RS)-2-[4-(4-chlorophenoxy)-2-(trifluoromethyl)phenyl]-1-(1H-1,2,4-triazol-1-yl)propan-2-ol; mefentrifluconazole

Information on: pyraclostrobin (ISO); methyl N-{2-[1-(4-chlorophenyl)-1H-pyrazol-3-yloxymethyl]phenyl}(N-methoxy)carbamate
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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: (2RS)-2-[4-(4-chlorophenoxy)-2-(trifluoromethyl)phenyl]-1-(1H-1,2,4-triazol-1-yl)propan-2-ol; mefentrifluconazole
Bioaccumulation potential:
Bioconcentration factor: 385
Does not accumulate in organisms.

Information on: pyraclostrobin (ISO); methyl N-{2-[1-(4-chlorophenyl)-1H-pyrazol-3-yloxymethyl]phenyl}(N-methoxy)carbamate
Bioaccumulation potential:
Bioconcentration factor: 379 - 507, Oncorhynchus mykiss (OECD Guideline 305)
Accumulation in organisms is not to be expected.

Additional information

Other ecotoxicological advice:
Do not discharge product into the environment without control.

13. Disposal Considerations

Must be sent to a suitable incineration plant, observing local regulations.

Contaminated packaging:
Contaminated packaging should be emptied as far as possible and disposed of in the same manner as the substance/product.

14. Transport Information

Domestic transport:

UN number or ID number:	UN 3082
UN proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (TRIAZOLE DERIVATIVE, PYRACLOSTROBIN)
Transport hazard class(es):	9, EHSM
Packing group:	III
Environmental hazards:	yes
Special precautions for user:	None known

Further information
Hazchem Code:3Z
IERG Number:47

Sea transport
IMDG

UN number or ID number:	UN 3082
UN proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (TRIAZOLE DERIVATIVE, PYRACLOSTROBIN)
Transport hazard class(es):	9, EHSM
Packing group:	III
Environmental hazards:	yes Marine pollutant: YES
Special precautions for user:	EmS: F-A; S-F

Air transport
IATA/ICAO

UN number or ID number:	UN 3082
UN proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (TRIAZOLE DERIVATIVE, PYRACLOSTROBIN)
Transport hazard class(es):	9, EHSM
Packing group:	III
Environmental hazards:	yes
Special precautions for user:	None known

Maritime transport in bulk according to IMO instruments

Maritime transport in bulk is not intended.

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

Other regulations

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

Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP): Schedule 5

APVMA Approval No: 95133

Registration status:

AICIS, AU

Contains non-registered, non-listed substance., Individual registration may be required., Please contact your BASF representative.

16. Other Information

Vertical lines in the left hand margin indicate an amendment from the previous version.

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.