

Safety data sheet

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BASF Safety data sheet according to UN GHS 4th rev. Date / Revised: 01.04.2021 Product: **Prowl CS**

Version: 3.0

(ID no. 30454382/SDS_CPA_00/EN)

Date of print 02.02.2022

1. Identification

Product identifier

Prowl CS

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

Relevant identified uses: crop protection product, herbicide

Details of the supplier of the safety data sheet

<u>Company:</u> BASF South Africa (Pty) Ltd 852 Sixteenth Road Midrand P O Box 2801 Halfway House 1685 SOUTH AFRICA

Telephone: +27 11 203 2400

Emergency telephone number

National emergency number: +27(011) 203 2573 International emergency number: Telephone: +49 180 2273-112

2. Hazards Identification

Classification of the substance or mixture

According to UN GHS criteria

Skin Corr./Irrit. 3

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Skin Sens. 1B Aquatic Acute 2 Aquatic Chronic 2

For the classifications not written out in full in this section the full text can be found in section 16.

Label elements

Globally Harmonized System (GHS)

Pictogram:



Signal Word: Warning

Hazard Statement:	
H316	Causes mild skin irritation.
H317	May cause an allergic skin reaction.
H401	Toxic to aquatic life.
H411	Toxic to aquatic life with long lasting effects.
Precautionary Statemen	it:
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 Statemen	its (Prevention):
P261	Avoid breathing mist.
P272	Contaminated work clothing should not be allowed out of the workplace.
P280	Wear protective gloves/clothing/eye protection.
Precautionary Statemen	its (Response):
P303 + P352	IF ON SKIN (or hair): Wash with plenty of soap and water.
P333 + P311	If skin irritation or rash occurs: Call a POISON CENTER or physician.
P362 + P364	Take off contaminated clothing and wash it before reuse.
P391	Collect spillage.
P332 + P313	If skin irritation occurs: Get medical attention.
Precautionary Statemen	its (Disposal):
P501	Dispose of contents and container to hazardous or special waste collection point.

Labeling of special preparations (GHS): May produce an allergic reaction. Contains: 2-Methyl-2H-isothiazol-3-one

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According to UN GHS criteria

Hazard determining component(s) for labelling: N-(1-Ethylpropyl)-2,6-dinitro-3,4-xylidine

Other hazards

According to UN GHS criteria

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

Substances

Not applicable

Mixtures

Chemical nature

crop protection product, herbicide, capsule suspension (CS)

Hazardous ingredients (GHS) According to UN GHS criteria

pendimethalin (ISO); N-(1-ethylpropyl)-2,6-c	linitro-3,4-xylidine
Content (W/W): 38,7 %	Acute Tox. 5 (oral)
CAS Number: 40487-42-1	Skin Sens. 1B
EC-Number: 254-938-2	Aquatic Acute 1
INDEX-Number: 609-042-00-X	Aquatic Chronic 1
	M-factor acute: 100

M-factor chronic: 10 H303, H317, H400, H410

2-Methyl-2H-isothiazol-3-one

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Date of print 02.02.2022 Acute Tox. 2 (Inhalation - dust)

Content (W/W): < 0,05 % CAS Number: 2682-20-4 EC-Number: 220-239-6 INDEX-Number: 613-326-00-9

Skin Corr./Irrit. 1B Eye Dam./Irrit. 1 Skin Sens. 1A Aquatic Acute 1 Aquatic Chronic 1 M-factor acute: 10 M-factor chronic: 1 H330, H317, H314, H301 + H311, H400, H410 EUH071

Specific concentration limit: Skin Sens. 1A: >= 0,0015 %

Acute Tox. 3 (oral)

Acute Tox. 3 (dermal)

Magnesium sulphate Content (W/W): < 20 % CAS Number: 10034-99-8

For the classifications not written out in full in this section the full text can be found in section 16.

4. First-Aid Measures

Description of first aid measures

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.

Most important symptoms and effects, both acute and delayed

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

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Indication of any immediate medical attention and special treatment needed Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote.

5. Fire-Fighting Measures

Extinguishing media

Suitable extinguishing media: water spray, foam, dry powder, carbon dioxide

Special hazards arising from the substance or mixture

Carbon monoxide, Carbon dioxide, Hydrogen cyanide, Hydrogen chloride, nitrogen oxides, sulfur oxides, halogenated compounds, cyanides, metal oxides The substances/groups of substances mentioned can be released in case of fire.

Advice for fire-fighters

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, protective equipment and emergency procedures

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 and material for containment and cleaning 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

Precautions for safe handling

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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.

Conditions for safe storage, including any incompatibilities

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: -5 °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: 40 °C Changes in the properties of the product may occur if substance/product is stored above indicated temperature for extended periods of time.

Specific end use(s)

For the relevant identified use(s) listed in Section 1 the advice mentioned in this section 7 is to be observed.

8. Exposure Controls/Personal Protection

Control parameters

Components with occupational exposure limits

10034-99-8: Magnesium sulphate

Exposure controls

Personal protective equipment

Respiratory protection:

Suitable respiratory protection for higher concentrations or long-term effect: Combination filter for gases/vapours of organic, inorganic, acid inorganic and alkaline compounds (e.g. EN 14387 Type ABEK).

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:

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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

Information on basic physical and chemical properties

Form: Colour: Odour: Odour threshold:	liquid yellow to brown faint odour, nutty
pH value:	Not determined due to potential health hazard by inhalation. approx. 7 - 9 (21 °C)
Melting point:	(measured with the undiluted substance) approx. 0 °C Information applies to the solvent.
Boiling point:	approx. 100 °C Information applies to the solvent.
Flash point:	No flash point - Measurement made up to the boiling point.
Evaporation rate:	
Flammability: Lower explosion limit:	not applicable not highly flammable
	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.

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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:	354 °C	(DIN EN 14522)
Vapour pressure:	approx. 23 hPa	
vapour procouro.	(20 °C)	
	Information applies to the solvent.	
Density:	approx. 1,18 g/cm3	
	(20 °C)	
Relative vapour density	. ,	
	not applicable	
Solubility in water:	dispersible	
Partitioning coefficient n-	octanol/water (log Kow):	
	not applicable	
I hermal decomposition:	Not a substance liable to self-decompo	osition according to UN transport
	regulations, class 4.1.	
	235 °C, 900 kJ/kg (DSC (OECD 113))	
Viscosity dynamic:	(onset temperature) 128 mPa.s	(OECD 114)
Viscosity, dynamic:	(20 °C, 100 1/s)	(OECD 114)
Explosion hazard:	not explosive	
Fire promoting properties	•	

Other information

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

10. Stability and Reactivity

Reactivity

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

Chemical stability

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

Possibility of hazardous reactions

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

Conditions to avoid

See SDS section 7 - Handling and storage.

Incompatible materials

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

Hazardous decomposition products

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

11. Toxicological Information

Information on toxicological effects

Acute toxicity

Assessment of acute toxicity: Virtually nontoxic after a single ingestion. Virtually nontoxic after a single skin contact. Virtually nontoxic by inhalation.

Experimental/calculated data: LD50 rat (oral): > 5.000 mg/kg (OECD Guideline 401)

LC50 rat (by inhalation): > 5,23 mg/l 4 h (OECD Guideline 403) No mortality was observed. An aerosol was tested.

LD50 rat (dermal): > 5.000 mg/kg (OECD Guideline 402)

Irritation

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

Experimental/calculated data: Skin corrosion/irritation rabbit: Slightly irritating. (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) guinea pig: sensitizing (OECD Guideline 406)

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.

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Carcinogenicity

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

Information on: pendimethalin (ISO); N-(1-ethylpropyl)-2,6-dinitro-3,4-xylidine Assessment of carcinogenicity:

In long-term studies in rats the substance induced thyroid tumors. The effect is caused by an animal specific mechanism that has no human counter part. In long-term studies in mice in which the substance was given by feed, a carcinogenic effect was not observed.

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.

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: pendimethalin (ISO); N-(1-ethylpropyl)-2,6-dinitro-3,4-xylidine Assessment of repeated dose toxicity: No substance-specific organtoxicity was observed after repeated administration to animals. Adaptive effects were observed after repeated exposure in animal studies.

Aspiration hazard

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The product has not been tested. The statement has been derived from the properties of the individual components. No aspiration hazard expected.

Other relevant toxicity information

Misuse can be harmful to health.

12. Ecological Information

Toxicity

Assessment of aquatic toxicity: Toxic to aquatic life with long lasting effects.

Toxicity to fish: LC50 (96 h) 20,36 mg/l, Oncorhynchus mykiss (OECD Guideline 203, static)

Aquatic invertebrates: EC50 (48 h) > 100 mg/l, Daphnia magna (OECD Guideline 202, part 1, static)

Aquatic plants: EC50 (72 h) 1,49 mg/l (growth rate), Pseudokirchneriella subcapitata (OECD Guideline 201)

EC50 (7 d) 19,25 mg/l (growth rate), Lemna gibba (OECD guideline 221)

No observed effect concentration (7 d) 1,0 mg/l (growth rate), Lemna gibba (OECD guideline 221)

Information on: pendimethalin (ISO); N-(1-ethylpropyl)-2,6-dinitro-3,4-xylidine Chronic toxicity to fish: No observed effect concentration (179 d) 0,02 mg/l, Brachydanio rerio (semistatic)

No observed effect concentration (288 d) 0,006 mg/l, Pimephales promelas

Information on: pendimethalin (ISO); N-(1-ethylpropyl)-2,6-dinitro-3,4-xylidine Chronic toxicity to aquatic invertebrates: No observed effect concentration (21 d) 0,0145 mg/l, Daphnia magna

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: pendimethalin (ISO); N-(1-ethylpropyl)-2,6-dinitro-3,4-xylidine Assessment biodegradation and elimination (H2O): Not readily biodegradable (by OECD criteria).

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Bioaccumulative potential

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

Information on: pendimethalin (ISO); N-(1-ethylpropyl)-2,6-dinitro-3,4-xylidine Bioaccumulation potential: Bioconcentration factor: 3.300 Based on a weight of evidence, the compound will not bioaccumulate.

Mobility in soil

Assessment transport between environmental compartments: Adsorption in soil: The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: pendimethalin (ISO); N-(1-ethylpropyl)-2,6-dinitro-3,4-xylidine Assessment transport between environmental compartments: Volatility: The substance will slowly evaporate into the atmosphere from the water surface. Adsorption in soil: Following exposure to soil, adsorption to solid soil particles is probable, therefore contamination of groundwater is not expected.

Results of PBT and vPvB assessment

The product does not contain a substance fulfilling the PBT (persistent/bioaccumulative/toxic) criteria or the vPvB (very persistent/very bioaccumulative) criteria.

Other adverse effects

The product does not contain substances that are listed in the Montreal Protocol on substances that deplete the ozone layer.

Additional information

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

13. Disposal Considerations

Waste treatment methods

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

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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

Land transport

ADR	
UN number UN proper shipping name:	UN3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains PENDIMETHALIN)
Transport hazard class(es): Packing group: Environmental hazards:	9, EHSM III yes
Special precautions for user:	None known
RID	
UN number UN proper shipping name:	UN3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains PENDIMETHALIN)
Transport hazard class(es): Packing group:	9, EHSM
Environmental hazards: Special precautions for user:	yes None known
<u>Inland waterway transport</u> ADN	
UN number UN proper shipping name:	UN3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains PENDIMETHALIN)
Transport hazard class(es): Packing group:	9, EHSM III

<u>Transport in inland waterway vessel</u> Not evaluated

yes

None known

Environmental hazards:

Special precautions for

user:

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<u>Sea transport</u>

IMDG

UN number:	UN 3082
UN proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,
	N.O.S. (contains PENDIMETHALIN)
Transport hazard class(es):	9, EHSM
Packing group:	III
Environmental hazards:	yes
	Marine pollutant: YES
Special precautions for	None known
user:	

Air transport

IATA/ICAO

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

Transport in bulk according to Annex II of MARPOL and the IBC Code

Not evaluated
Not evaluated
Not evaluated
Not evaluated
Not evaluated

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).

15. Regulatory Information

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

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

16. Other Information

	s, hazard symbols and hazard statements, if mentioned in section 2 or 3:
Skin Corr./Irrit.	Skin corrosion/irritation
Skin Sens.	Skin sensitization
Aquatic Acute	Hazardous to the aquatic environment - acute
Aquatic Chronic	Hazardous to the aquatic environment - chronic
Acute Tox.	Acute toxicity
Eye Dam./Irrit.	Serious eye damage/eye irritation
H303	May be harmful if swallowed.
H317	May cause an allergic skin reaction.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H330	Fatal if inhaled.
H314	Causes severe skin burns and eye damage.
H301 + H311	Toxic if swallowed or in contact with skin
EUH071	Corrosive to the respiratory tract.

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.

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