

Safety Data Sheet



Specticle® Herbicide

Version 1 / AUS
102000023686

Revision Date: 18.06.2020
Print Date: 18.06.2020

SECTION 1: IDENTIFICATION OF THE MATERIAL AND SUPPLIER

1.1 Product identifier

Trade name Specticle® Herbicide
Product code (UVP) 79930208

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

Use Herbicide

1.3 Details of the supplier of the safety data sheet

Supplier Bayer Cropscience Pty Ltd
ABN 87 000 226 022
Level 1, 8 Redfern Road
3123 Hawthorn East
Victoria
Australia

Telephone (03) 9248 6888
Telefax (03) 9248 6800
Responsible Department 1800 804 479 Technical Information Service
Website www.es.bayer.com.au

1.4 Emergency telephone no.

Emergency telephone no. 1800 033 111 IXOM Operations Pty Ltd

SECTION 2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification in accordance with Australian GHS Regulation

Specific target organ toxicity - single exposure: Category 2
H371 May cause damage to organs (Nervous system) if swallowed.

Specific target organ toxicity - repeated exposure: Category 2
H373 May cause damage to organs (Nervous system) through prolonged or repeated exposure if swallowed.

Acute aquatic toxicity: Category 1
H400 Very toxic to aquatic life.

Chronic aquatic toxicity: Category 1
H410 Very toxic to aquatic life with long lasting effects.

2.2 Label elements

Hazard label for supply/use required.

Hazardous components which must be listed on the label:

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Indaziflam

Signal word: Warning

Hazard statements

- H371 May cause damage to organs (Nervous system) if swallowed.
H373 May cause damage to organs (Nervous system) through prolonged or repeated exposure if swallowed.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements

- P260 Do not breathe mist.
P260 Do not breathe spray.
P264 Wash hands thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P314 Get medical advice/ attention if you feel unwell.
P307 + P311 IF exposed: Call a POISON CENTER or doctor/ physician.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local regulation.

2.3 Other hazards

No other hazards known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature

Indaziflam 200 g/L
Suspension concentrate (=flowable concentrate)(SC)

| Chemical name | CAS-No. | Concentration [%] |
|---|-------------|--------------------|
| Indaziflam | 950782-86-2 | 19.05 |
| Ethoxylated polyarylphenol | 99734-09-5 | >= 1.00 - <= 25.00 |
| 1,2-Benzisothiazol-3(2H)-one | 2634-33-5 | >= 0.005 - <= 0.05 |
| 1,2-Propanediol | 57-55-6 | >= 5.00 - <= 10.00 |
| Other ingredients (non-hazardous) to 100% | | |

SECTION 4. FIRST AID MEASURES

If poisoning occurs, immediately contact a doctor or Poisons Information Centre (telephone 13 11 26), and follow the advice given. Show this Safety Data Sheet to the doctor.

4.1 Description of first aid measures

General advice

Move out of dangerous area. Place and transport victim in stable position (lying sideways). Remove contaminated clothing immediately and dispose of safely.

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| Inhalation | Move to fresh air. In case of respiratory arrest induce breathing with a respiratory device. Seek medical advice. Call a physician or poison control center immediately. |
| Skin contact | Wash off thoroughly with plenty of soap and water, if available with polyethyleneglycol 400, subsequently rinse with water. If symptoms persist, call a physician. |
| Eye contact | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Get medical attention if irritation develops and persists. |
| Ingestion | Do NOT induce vomiting. Call a physician or poison control center immediately. Rinse mouth. |

4.2 Most important symptoms and effects, both acute and delayed

Symptoms No symptoms known or expected.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment Treat symptomatically. In case of ingestion gastric lavage should be considered in cases of significant ingestions only within the first 2 hours. However, the application of activated charcoal and sodium sulphate is always advisable. There is no specific antidote.

SECTION 5. FIRE FIGHTING MEASURES

5.1 Extinguishing media

Suitable Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable High volume water jet

5.2 Special hazards arising from the substance or mixture In the event of fire the following may be released: Hydrogen cyanide (hydrocyanic acid), Hydrogen fluoride, Carbon monoxide (CO), Nitrogen oxides (NOx)

5.3 Advice for firefighters

Special protective equipment for firefighters In the event of fire and/or explosion do not breathe fumes. In the event of fire, wear self-contained breathing apparatus.

Further information Contain the spread of the fire-fighting media. Do not allow run-off from fire fighting to enter drains or water courses.
Remove product from areas of fire, or otherwise cool containers with water in order to avoid pressure being built up due to heat. Whenever possible, contain fire-fighting water by diking area with sand or earth. Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Hazchem Code •3Z



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SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Precautions Avoid contact with spilled product or contaminated surfaces. Use personal protective equipment.

6.2 Environmental precautions Do not allow to get into surface water, drains and ground water.

6.3 Methods and materials for containment and cleaning up

Methods for cleaning up Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Clean contaminated floors and objects thoroughly, observing environmental regulations. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections Information regarding safe handling, see section 7.
Information regarding personal protective equipment, see section 8.
Information regarding waste disposal, see section 13.

SECTION 7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Advice on safe handling Use only in area provided with appropriate exhaust ventilation.

Advice on protection against fire and explosion Keep away from heat and sources of ignition.

Hygiene measures Avoid contact with skin, eyes and clothing. Keep working clothes separately. Wash hands before breaks and immediately after handling the product. Remove soiled clothing immediately and clean thoroughly before using again. Garments that cannot be cleaned must be destroyed (burnt).

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers Keep containers tightly closed in a dry, cool and well-ventilated place. Store in original container. Store in a place accessible by authorized persons only. Protect from frost. Keep away from direct sunlight.

Advice on common storage Keep away from food, drink and animal feedingstuffs.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

| Components | CAS-No. | Control parameters | Update | Basis |
|--------------------------------|-------------|--------------------|---------|----------|
| Indaziflam | 950782-86-2 | 0.56 mg/m3 (TWA) | | OES BCS* |
| 1,2-Propanediol (Particulate.) | 57-55-6 | 10 mg/m3 (TWA) | 12 2011 | AU NOEL |
| 1,2-Propanediol | 57-55-6 | 474 mg/m3/150 ppm | 12 2011 | AU NOEL |

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| | | | | |
|----------------------------------|--|-------|--|--|
| (Total vapour and particulates.) | | (TWA) | | |
|----------------------------------|--|-------|--|--|

*OES BCS: Internal Bayer AG, Crop Science Division "Occupational Exposure Standard"

8.2 Exposure controls

Respiratory protection

Respiratory protection is not required under anticipated circumstances of exposure.
Respiratory protection should only be used to control residual risk of short duration activities, when all reasonably practicable steps have been taken to reduce exposure at source e.g. containment and/or local extract ventilation. Always follow respirator manufacturer's instructions regarding wearing and maintenance.

Hand protection

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.

Wash gloves when contaminated. Dispose of when contaminated inside, when perforated or when contamination on the outside cannot be removed. Wash hands frequently and always before eating, drinking, smoking or using the toilet.

| | |
|----------------------|--|
| Material | Nitrile rubber |
| Rate of permeability | > 480 min |
| Glove thickness | > 0.4 mm |
| Protective index | Class 6 |
| Directive | Protective gloves complying with EN 374. |

Eye protection

Wear goggles (conforming to EN166, Field of Use = 5 or equivalent).

Skin and body protection

Wear standard coveralls and Category 3 Type 4 suit.
If there is a risk of significant exposure, consider a higher protective type suit.

Wear two layers of clothing wherever possible. Polyester/cotton or cotton overalls should be worn under chemical protection suit and should be professionally laundered frequently.

General protective measures

In normal use and handling conditions please refer to the label and/or leaflet. In all other cases the above mentioned recommendations would apply.

Engineering Controls

Advice on safe handling Use only in area provided with appropriate exhaust ventilation.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

| | |
|---------------|------------|
| Form | suspension |
| Colour | white |

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| | |
|---|---|
| Odour | characteristic |
| Odour Threshold | No data available |
| pH | 6.0 - 9.0 (1 %) (23 °C) (deionized water) |
| Melting point/range | No data available |
| Boiling Point | No data available |
| Flash point | > 100 °C No flash point - Determination conducted up to the boiling point. |
| Flammability | No data available |
| Auto-ignition temperature | > 500 °C The product is not self-ignitable. |
| Self-accelarating decomposition temperature (SADT) | No data available |
| Upper explosion limit | No data available |
| Lower explosion limit | No data available |
| Vapour pressure | No data available |
| Evaporation rate | No data available |
| Relative vapour density | No data available |
| Relative density | 1.051 (20 °C) 1.044 (40 °C) |
| Density | ca. 1.05 g/cm ³ (20 °C) |
| Water solubility | No data available |
| Partition coefficient: n-octanol/water | Indaziflam: log Pow: 3.7 (20 °C) (pH 7) |
| Viscosity, dynamic | 30 - 75 mPa.s (20 °C) Velocity gradient 100 /s 80 - 180 mPa.s (20 °C) Velocity gradient 20 /s |
| Viscosity, kinematic | 113 mm ² /s (20 °C) Shear rate of 20/sec 98 mm ² /s (40 °C) Shear rate of 20/sec 57 mm ² /s (20 °C) Shear rate of 100/sec 40 mm ² /s (40 °C) Shear rate of 100/sec |
| Surface tension | 40.5 mN/m (20 °C) Determined as a 0,1% solution in distilled water (1 g/l). 27.1 mN/m (25 °C) Determined in the undiluted form. |
| Oxidizing properties | No oxidizing properties |
| Explosivity | Not explosive 92/69/EEC, A.14 / OECD 113 |
| 9.2Other information | Further safety related physical-chemical data are not known. |



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SECTION 10. STABILITY AND REACTIVITY

10.1 Reactivity

Thermal decomposition Stable under normal conditions.

10.2 Chemical stability Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions No hazardous reactions when stored and handled according to prescribed instructions.

10.4 Conditions to avoid Extremes of temperature and direct sunlight.

10.5 Incompatible materials Store only in the original container.

10.6 Hazardous decomposition products No decomposition products expected under normal conditions of use.

SECTION 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute oral toxicity LD50 (Rat) > 2,000 mg/kg
Test conducted with a similar formulation.

Acute inhalation toxicity LC50 (Rat) \geq 3.624 mg/l
Exposure time: 4 h
Determined in the form of a respirable aerosol.
Highest attainable concentration.
Test conducted with a similar formulation.

Acute dermal toxicity LD50 (Rat) > 2,000 mg/kg
Test conducted with a similar formulation.

Skin corrosion/irritation No skin irritation (Rabbit)
Test conducted with a similar formulation.

Serious eye damage/eye irritation Slight irritant effect - does not require labelling. (Rabbit)
Test conducted with a similar formulation.

Respiratory or skin sensitisation Skin: Non-sensitizing. (Guinea pig)
Test conducted with a similar formulation.

Assessment mutagenicity

Indaziflam was not mutagenic or genotoxic in a battery of in vitro and in vivo tests.

Assessment carcinogenicity

Indaziflam was not carcinogenic in lifetime feeding studies in rats and mice.

Assessment toxicity to reproduction

Indaziflam was not a primary reproductive toxicant in a two-generation study in rats.

Assessment developmental toxicity

Indaziflam did not cause developmental toxicity in rats and rabbits.

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Assessment STOT Specific target organ toxicity – single exposure

Indaziflam: May cause damage to organs in nervous system following oral route.

Assessment STOT Specific target organ toxicity – repeated exposure

Indaziflam caused neurobehavioral effects and/or neuropathological changes in subchronic studies in rats and dogs. Indaziflam: May cause damage to organs (Nervous system) through prolonged or repeated exposure.

Aspiration hazard

Based on available data, the classification criteria are not met.

Information on likely routes of exposure

Caution!

Harmful if swallowed, inhaled or absorbed through the skin.

Harmful if inhaled.

Harmful if absorbed through skin.

May cause slight irritation.

Harmful if swallowed.

Eye contact, Inhalation, Skin Absorption, Ingestion

Toxic to fish and aquatic invertebrates., This product may cause adverse effects on non-target plants.

Early onset symptoms related to exposure

Refer to Section 4

Delayed health effects from exposure

Refer to Section 11

Exposure levels and health effects

Refer to Section 4

Interactive effects

Not known

When specific chemical data is not available

Not applicable

Mixture of chemicals

Refer to Section 2.1

SECTION 12. ECOLOGICAL INFORMATION

12.1 Toxicity

Toxicity to fish

LC50 (Lepomis macrochirus (Bluegill sunfish)) 0.85 mg/l
Exposure time: 96 h
Test conducted with a similar formulation.

Toxicity to aquatic invertebrates

EC50 (Daphnia magna (Water flea)) 149 mg/l
Exposure time: 48 h

Toxicity to aquatic plants

EC50 (Skeletonema costatum) 0.603 mg/l
Growth rate; Exposure time: 96 h

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NOEC (Skeletonema costatum) 0.125 mg/l
Growth rate; Exposure time: 96 h

EC50 (Raphidocelis subcapitata (freshwater green alga)) 0.750 mg/l
Growth rate; Exposure time: 72 h

EC50 (Lemna gibba (gibbous duckweed)) 0.000712 mg/l
Growth rate; Exposure time: 7 d

12.2 Persistence and degradability

Biodegradability Indaziflam:
Not rapidly biodegradable

Koc Indaziflam: Koc: 496

12.3 Bioaccumulative potential

Bioaccumulation Indaziflam: Bioconcentration factor (BCF) 66
Does not bioaccumulate.

12.4 Mobility in soil

Mobility in soil Indaziflam: Moderately mobile in soils

12.5 Other adverse effects

Additional ecological information No other effects to be mentioned.

SECTION 13. DISPOSAL CONSIDERATIONS

Triple-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 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

ADG

| | |
|----------------------------|---|
| UN number | 3082 |
| Transport hazard class(es) | 9 |
| Subsidiary Risk | None |
| Packaging group | III |
| Description of the goods | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (INDAZIFLAM SOLUTION) |
| Hazchem Code | •3Z |

AU01: Environmentally Hazardous Substances meeting the descriptions of UN 3077 or UN 3082 are not subject to this Code when transported by road or rail in;

- packagings that do not incorporate a receptacle exceeding 500 kg(L); or
- IBCs

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IMDG

| | |
|----------------------------|---|
| UN number | 3082 |
| Transport hazard class(es) | 9 |
| Subsidiary Risk | None |
| Packaging group | III |
| Marine pollutant | YES |
| Description of the goods | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (INDAZIFLAM SOLUTION) |

IATA

| | |
|----------------------------|--|
| UN number | 3082 |
| Transport hazard class(es) | 9 |
| Subsidiary Risk | None |
| Packaging group | III |
| Environm. Hazardous Mark | YES |
| Description of the goods | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (INDAZIFLAM SOLUTION) |

SECTION 15. REGULATORY INFORMATION

Registered according to the Agricultural and Veterinary Chemicals Code Act 1994
Australian Pesticides and Veterinary Medicines Authority approval number: 64673

SUSMP classification (Poison Schedule)

Schedule 6 (Standard for the Uniform Scheduling of Medicines and Poisons)

SECTION 16. OTHER INFORMATION

Trademark information Specticle® is a Registered Trademark of the Bayer Group.

Abbreviations and acronyms

| | |
|---------------|---|
| ADN | European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways |
| ADR | European Agreement concerning the International Carriage of Dangerous Goods by Road |
| ATE | Acute toxicity estimate |
| AU OEL | Australia. OELs. (Adopted National Exposure Standards for Atmospheric Contaminants in the Occupational Environment) |
| CAS-Nr. | Chemical Abstracts Service number |
| CEILING Conc. | Ceiling Limit Value Concentration |
| EC-No. | European community number |
| ECx | Effective concentration to x % |
| EINECS | European inventory of existing commercial substances |
| ELINCS | European list of notified chemical substances |
| EN | European Standard |
| EU | European Union |
| IATA | International Air Transport Association |

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| IBC | International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (IBC Code) |
| ICx | Inhibition concentration to x % |
| IMDG | International Maritime Dangerous Goods |
| LCx | Lethal concentration to x % |
| LDx | Lethal dose to x % |
| LOEC/LOEL | Lowest observed effect concentration/level |
| MARPOL | MARPOL: International Convention for the prevention of marine pollution from ships |
| N.O.S. | Not otherwise specified |
| NOEC/NOEL | No observed effect concentration/level |
| OECD | Organization for Economic Co-operation and Development |
| OES BCS | OES BCS: Internal Bayer AG, Crop Science Division "Occupational Exposure Standard" |
| PEAK | PEAK: Exposure Standard - Peak means a maximum or peak airborne concentration of a particular substance determined over the shortest analytically practicable period of time which does not exceed 15 minutes. |
| RID | Regulations concerning the International Carriage of Dangerous Goods by Rail |
| SK-SEN | Skin sensitiser |
| SKIN_DES | SKIN_DES: Skin notation: Absorption through the skin may be a significant source of exposure. |
| STEL | STEL: Exposure standard - short term exposure limit (STEL): A 15 minute TWA exposure which should not be exceeded at any time during a working day even if the eight-hour TWA average is within the TWA exposure standard. Exposures at the STEL should not be longer than 15 minutes and should not be repeated more than four times per day. There should be at least 60 minutes between successive exposures at the STEL. |
| TWA | TWA: Exposure standard - time-weighted average (TWA): The average airborne concentration of a particular substance when calculated over a normal eight-hour working day, for a five-day working week. |
| TWA | Time weighted average |
| UN | United Nations |
| WHO | World health organisation |

This SDS summarises our best knowledge of the health and safety hazard information of the product and how to safely handle and use the product in the workplace. Each user should read this SDS and consider the information in the context of how the product will be handled and used in the workplace including in conjunction with other products.

If clarification or further information is needed to ensure that an appropriate risk assessment can be made, the user should contact this company.

Our responsibility for products sold is subject to our standard terms and conditions, a copy of which is sent to our customers and is also available on request.

Reason for Revision: The following sections have been revised: Section 2: Hazards Identification. Section 3: Composition / Information on Ingredients. Section 16: Other Information.

Changes since the last version are highlighted in the margin. This version replaces all previous versions.