

**Alion**[®]

Date of Issue: 26.07.17

Spec No. 102000023685

1. Identification of the Substance/Mixture and Supplier.

Product name:	Alion
Synonyms / alternative names:	Indaziflam SC 500C G
Application:	Herbicide
EPA approval:	HSR101193
Company:	Bayer New Zealand Limited, 3 Argus Place, Hillcrest, Auckland 0627, New Zealand.
Telephone:	0800 428 246
Facsimile:	(09) 441 8645
Emergency telephone:	0800 734 607 (24hr)

2. Hazards Identification.

Hazard classification:	Classified as hazardous according to the criteria in the Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001.
Classification and type:	6.1E May be harmful 6.9B May cause damage to organs through prolonged or repeated exposure 9.1A Very toxic to aquatic life with long lasting effects 9.2A Very toxic to the soil environment

3. Composition/Information on Ingredients.

Chemical nature

Suspension concentrate (=flowable concentrate)(SC)

Indaziflam 500 g/l

Hazardous components

Chemical Name	CAS-No	Concentration (%)
Indaziflam	950782-86-2	45.46

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4. 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.
Inhalation:	Move to fresh air. Keep patient warm and at rest. Call a doctor or poison control centre 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:	Rinse mouth. Do NOT induce vomiting. Call a doctor or poison control centre immediately.
Most important symptoms and effects, both acute and delayed:	No symptoms known or expected.
Notes to physician:	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.
Further information:	Contact the National Poisons and Hazardous Chemicals Information centre in Dunedin, PO Box 913, Dunedin. Phone 0800 POISON (0800 764 766).

5. Fire-Fighting Measures.

Suitable extinguishing media:	Water spray, alcohol-resistant foam, dry chemical or carbon dioxide (CO ₂).
Unsuitable extinguishing media:	High volume water jet
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)

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<p>Special protective equipment for fire-fighters:</p> <p>Further information:</p>	<p>Nitrogen oxides (NO_x)</p> <p>In the event of fire and/or explosion do not breathe fumes. In the event of fire, wear self-contained breathing apparatus.</p> <p>Contain the spread of the fire-fighting media. Do not allow run-off from fire-fighting to enter drains or water courses.</p>
<p>6. Accidental Release Measures.</p>	
<p>Personal precautions:</p> <p>Environmental precautions:</p> <p>Methods for cleaning up:</p> <p>Additional advice:</p>	<p>Avoid contact with spilled product or contaminated surfaces. Use personal protective equipment.</p> <p>Do not allow to get into surface water, drains and ground water.</p> <p>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.</p> <p>Information regarding safe handling: see section 7. Information regarding personal protective equipment: see section 8. Information regarding waste disposal, see section 13.</p>
<p>7. Handling and Storage.</p>	
<p>Handling:</p> <p>Storage:</p>	<p>Advice on safe handling Use only in areas provided with appropriate exhaust ventilation.</p> <p>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).</p> <p>Requirements for storage areas and containers Store in original container. Keep containers tightly closed in a dry, cool and well-ventilated place. Store in a place accessible by authorized persons only. Protect from freezing. Keep away from direct sunlight.</p>

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

Specific end uses
Refer to the label and/or leaflet.

8. Exposure Control/Personal Protection.

Components with workplace control parameters

Component	CAS-No.	Control parameters	Update	Basis
Indaziflam	950782-86-2	0.14 mg/m ³ (TWA)		OES BCS*

*OES BCS: Internal Bayer CropScience "Occupational Exposure Standard"

Personal protect equipment:

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

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 6 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

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should be professionally laundered frequently.

9. Physical and Chemical Properties.

Form:	suspension
Colour:	white to light beige
Odour:	weak, characteristic
pH	7,0 - 8,5 at 1 % (23 °C) (deionized water)
Flash point:	Not relevant; aqueous solution
Density:	ca. 1.10 g/cm ³ at 20 °C
Water solubility:	Dispersible
Viscosity, dynamic:	250 - 400 mPa.s at 20 °C Velocity gradient 20 /s 100 - 250 mPa.s at 20 °C Velocity gradient 100 /s
Surface tension:	38 mN/m at 25 °C Determined as a 0,1% solution in distilled water (1 g/l).
Explosivity:	Not applicable
Other information:	Further safety related physical-chemical data are not known.

10. Stability and Reactivity.

Reactivity:	Stable under normal conditions.
Chemical stability:	Stable under recommended storage conditions.
Possibility of hazardous reactions:	No hazardous reactions when stored and handled according to prescribed instructions.
Conditions to avoid:	Extremes of temperature and direct sunlight.
Incompatible materials:	Store only in the original container.
Hazardous decomposition products:	No decomposition products expected under normal conditions of use.

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11. Toxicological Information.

Acute oral toxicity:	LD50 (Rat) > 2.000 mg/kg
Acute inhalation toxicity:	LC50 (Rat) 2,53 mg/l Exposure time: 4 h Determined in the form of a respirable aerosol. Highest attainable concentration.
Acute dermal toxicity:	LD50 (Rat) > 2.000 mg/kg
Skin irritation:	No skin irritation (Rabbit)
Eye irritation:	No eye irritation (Rabbit)
Sensitization:	Non-sensitizing. (Mouse) OECD Test Guideline 429, local lymph node assay (LLNA)
Assessment repeated dose toxicity:	Indaziflam caused neurobehavioral effects and/or neuropathological changes in subchronic studies in rats and dogs.
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.
Aspiration hazard:	Based on available data, the classification criteria are not met.

12. Ecological Information.

Toxicity to fish:	LC50 (Lepomis macrochirus (Bluegill sunfish)) 0,85 mg/l Exposure time: 96 h
Toxicity to	EC50 (Daphnia magna (Water flea)) > 100 mg/l

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aquatic invertebrates:	Exposure time: 48 h
Toxicity to aquatic plants:	EC50 (Lemna gibba (gibbous duckweed)) 0,000151 mg/l Growth rate; Exposure time: 7 d Test conducted with a similar formulation. EC50 (Raphidocelis subcapitata (freshwater green alga)) 0,094 mg/l Growth rate; Exposure time: 72 h Test conducted with a similar formulation.
Biodegradability:	Indaziflam: Not rapidly biodegradable
Koc	Indaziflam: Koc: 496
Bioaccumulative potential:	Indaziflam: Bioconcentration factor (BCF) 66 Does not bioaccumulate.
Mobility in soil:	Indaziflam: Moderately mobile in soils
Results of PBT and vPvB assessment:	Indaziflam: This substance is not considered to be persistent, bioaccumulative and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulative (vPvB).
Other adverse effects:	No other effects to be mentioned.
13. Disposal Considerations.	
Product disposal:	Dispose of this product only by using according to the label, or at an approved landfill or other approved facility.
Container disposal:	Triple rinse containers. Recycle if possible. If allowed under local authority, burn if circumstances, especially wind direction permit, otherwise crush and bury in an approved local authority facility. Do not use container for any other purpose.
14. Transport Information.	
ADR/RID/ADN:	UN 3082 Environmentally Hazardous Substance, Liquid, N.O.S. (Indaziflam Solution), Class 9, Packing Group III, Hazchem Code 3Z.
Sea (IMDG-Code):	UN 3082 Environmentally Hazardous Substance, Liquid, N.O.S. (Indaziflam Solution), Class 9, Packing Group III, Hazchem Code 3Z.
Air (ICAO/IATA):	UN 3082 Environmentally Hazardous Substance, Liquid, N.O.S. (Indaziflam Solution), Class 9, Packing Group III, Hazchem Code 3Z.

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Note: This transportation information is not intended to convey all specific regulatory information relating to this product. It does not address regulatory variations due to package size or special transportation requirements.

15. Regulatory Information.

HSNO Approval Number: HSR101193

HSNO Controls: See www.epa.govt.nz for controls

ACVM Registration: P009421

ACVM Controls: See www.foodsafety.govt.nz for registration conditions

16. Other Information.

Not applicable

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The data given here is based on current knowledge and experience. The purpose of this Safety Data Sheet is to describe products in terms of their safety requirements. The above details do not imply any guarantee concerning composition, properties or performance of the product.