



ALION 500 SC

Version 6 / EU
102000023685

1/11

Revision Date: 28.05.2020
Print Date: 05.10.2020

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Trade name IALION 500 SC
Product code (UVP) 79899351, 84105899

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 AG
Kaiser-Wilhelm-Allee 1
51373 Leverkusen
Germany
Telefax +49(0)2173-38-7394
Responsible Department Substance Classification & Registration
+49(0)2173-38-3409 (during business hours only)
Email: BCS-SDS@bayer.com

1.4 Emergency telephone no.

Emergency telephone no. Global Incident Response Hotline (24h)
+1 (760) 476-3964 (Company 3E for Bayer AG, Crop Science Division)

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification in accordance with Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures, as amended.

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

Labelling in accordance with Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures, as amended.

Hazard label for supply/use required.

**ALION 500 SC**Version 6 / EU
102000023685

2/11

Revision Date: 28.05.2020
Print Date: 05.10.2020**Hazardous components which must be listed on the label:**

- 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.
H410	Very toxic to aquatic life with long lasting effects.
EUH208	Contains 1,2-benzisothiazolin-3-one. May produce an allergic reaction.
EUH401	To avoid risks to human health and the environment, comply with the instructions for use.

Precautionary statements

P260	Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
P280	Wear protective gloves/ protective clothing/ eye protection/ face protection.
P308 + P311	IF exposed or concerned: Call a POISON CENTER/ doctor/ physician.
P391	Collect spillage.
P501	Dispose of contents/container in accordance with local regulation.

2.3 Other hazards

No other hazards known.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**3.2 Mixtures****Chemical nature**Suspension concentrate (=flowable concentrate)(SC)
Indaziflam 500 g/l**Hazardous components**

Hazard statements according to Regulation (EC) No. 1272/2008

Name	CAS-No. / EC-No. / REACH Reg. No.	Classification	Conc. [%]
		REGULATION (EC) No 1272/2008	
Indaziflam	950782-86-2 01-2119859514-31-xxxx	STOT SE 2, H371 STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	45,46
Ethoxylated polyarylphenol	99734-09-5	Aquatic Chronic 3, H412	>= 0,1 – <= 25
1,2-Propanediol	57-55-6 200-338-0 01-2119456809-23-XXXX	Not classified	>= 1

**ALION 500 SC**Version 6 / EU
102000023685

3/11

Revision Date: 28.05.2020
Print Date: 05.10.2020

1,2-Benzisothiazol-3(2H)-one	2634-33-5 220-120-9 01-2120761540-60-0003	Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 Acute Tox. 4, H302 Aquatic Acute 1, H400	> 0,005 – < 0,05
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Further information

Indaziflam	950782-86-2	M-Factor: 10.000 (acute), 1.000 (chronic)
1,2-Benzisothiazol-3(2H)-one	2634-33-5	M-Factor: 10 (acute)

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: FIRST AID MEASURES**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.
Inhalation	Move to fresh air. Keep patient warm and at rest. 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	Rinse mouth. Do NOT induce vomiting. Call a physician or poison control center immediately.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms	No symptoms known or expected.
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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.
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SECTION 5: FIREFIGHTING MEASURES**5.1 Extinguishing media**

Suitable	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
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**ALION 500 SC**Version 6 / EU
102000023685

4/11

Revision Date: 28.05.2020
Print Date: 05.10.2020

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.

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.
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6.2 Environmental precautions	Do not allow to get into surface water, drains and ground water.
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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.
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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.
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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 freezing. Keep away from direct sunlight.
Advice on common storage	Keep away from food, drink and animal feedingstuffs.
Suitable materials	HDPE (1000L IBC)

**ALION 500 SC**Version 6 / EU
102000023685

5/11

Revision Date: 28.05.2020
Print Date: 05.10.2020**7.3 Specific end use(s)** Refer to the label and/or leaflet.**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION****8.1 Control parameters**

Components	CAS-No.	Control parameters	Update	Basis
Indaziflam	950782-86-2	0,56 mg/m ³ (TWA)		OES BCS*

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

8.2 Exposure controls**Personal protective 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 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.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**9.1 Information on basic physical and chemical properties**

**ALION 500 SC**Version 6 / EU
102000023685

6/11

Revision Date: 28.05.2020
Print Date: 05.10.2020

Form	suspension
Colour	white to light beige
Odour	weak, characteristic
Odour Threshold	No data available
pH	7,0 - 8,5 (1 %) (23 °C) (deionized water) 7,5 - 9,5 (100 %) (23 °C)
Melting point/range	No data available
Boiling Point	No data available
Flash point	> 100 °C Not relevant; aqueous solution
Flammability	No data available
Auto-ignition temperature	555 °C
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	No data available
Density	ca. 1,10 g/cm ³ (20 °C)
Water solubility	suspensive
Partition coefficient: n-octanol/water	Indaziflam: log Pow: 3,7 (20 °C) (pH 7)
Viscosity, dynamic	250 - 400 mPa.s (20 °C) Velocity gradient 20 /s 100 - 250 mPa.s (20 °C) Velocity gradient 100 /s
Viscosity, kinematic	No data available
Surface tension	30,9 mN/m (25 °C) Determined in the undiluted form.
Oxidizing properties	No oxidizing properties
Explosivity	Not explosive 92/69/EEC, A.14 / OECD 113
9.2 Other information	Further safety related physical-chemical data are not known.

**ALION 500 SC**Version 6 / EU
102000023685

7/11

Revision Date: 28.05.2020
Print Date: 05.10.2020**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**Acute inhalation toxicity** LC50 (Rat) > 2,53 mg/l
Exposure time: 4 h
Determined in the form of a respirable aerosol.
No deaths
Highest attainable concentration.**Acute dermal toxicity** LD50 (Rat) > 2.000 mg/kg**Skin corrosion/irritation** No skin irritation (Rabbit)**Serious eye damage/eye irritation** No eye irritation (Rabbit)**Respiratory or skin sensitisation** Non-sensitizing. (Mouse)
OECD Test Guideline 429, local lymph node assay (LLNA)**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.

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.

**ALION 500 SC**Version 6 / EU
102000023685

8/11

Revision Date: 28.05.2020
Print Date: 05.10.2020**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.

SECTION 12: ECOLOGICAL INFORMATION**12.1 Toxicity****Toxicity to fish** LC50 (Lepomis macrochirus (Bluegill sunfish)) 0,85 mg/l
Exposure time: 96 h**Toxicity to aquatic invertebrates** EC50 (Daphnia magna (Water flea)) > 100 mg/l
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.**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 Results of PBT and vPvB assessment****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).**12.6 Other adverse effects****Additional ecological information** No other effects to be mentioned.

SECTION 13: DISPOSAL CONSIDERATIONS**13.1 Waste treatment methods**

**ALION 500 SC**Version 6 / EU
102000023685

9/11

Revision Date: 28.05.2020
Print Date: 05.10.2020

Product	In accordance with current regulations and, if necessary, after consultation with the site operator and/or with the responsible authority, the product may be taken to a waste disposal site or incineration plant.
Contaminated packaging	Not completely emptied packagings should be disposed of as hazardous waste.
Waste key for the unused product	02 01 08* agrochemical waste containing hazardous substances

SECTION 14: TRANSPORT INFORMATION**ADR/RID/ADN**

14.1 UN number	3082
14.2 Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (INDAZIFLAM SOLUTION)
14.3 Transport hazard class(es)	9
14.4 Packaging Group	III
14.5 Environm. Hazardous Mark	YES
Hazard no.	90
Tunnel Code	-

This classification is in principle not valid for carriage by tank vessel on inland waterways. Please refer to the manufacturer for further information.

IMDG

14.1 UN number	3082
14.2 Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (INDAZIFLAM SOLUTION)
14.3 Transport hazard class(es)	9
14.4 Packaging Group	III
14.5 Marine pollutant	YES

IATA

14.1 UN number	3082
14.2 Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (INDAZIFLAM SOLUTION)
14.3 Transport hazard class(es)	9
14.4 Packaging Group	III
14.5 Environm. Hazardous Mark	YES

14.6 Special precautions for user

See sections 6 to 8 of this Safety Data Sheet.

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

No transport in bulk according to the IBC Code.

**ALION 500 SC**Version 6 / EU
102000023685

10/11

Revision Date: 28.05.2020
Print Date: 05.10.2020**SECTION 15: REGULATORY INFORMATION****15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture****Further information**

WHO-classification: III (Slightly hazardous)

15.2 Chemical safety assessment

A chemical safety assessment is not required.

SECTION 16: OTHER INFORMATION**Text of the hazard statements mentioned in Section 3**

H302	Harmful if swallowed.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H371	May cause damage to organs.
H373	May cause damage to organs (Nervous system) through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

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
CAS-Nr.	Chemical Abstracts Service number
Conc.	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
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
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail



ALION 500 SC

Version 6 / EU
102000023685

11/11

Revision Date: 28.05.2020
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TWA Time weighted average
UN United Nations
WHO World health organisation

The information contained within this Safety Data Sheet is in accordance with the guidelines established by Regulation (EU) 1907/2006 and Regulation (EU) 2015/830 amending Regulation (EU) No 1907/2006 and any subsequent amendments. This data sheet complements the user's instructions, but does not replace them. The information it contains is based on the knowledge available about the product concerned at the time it was compiled. Users are further reminded of the possible risks of using a product for purposes other than those for which it was intended. The required information complies with current EEC legislation. Addressees are requested to observe any additional national requirements.

Reason for Revision:

The following sections have been revised: Section 2: Hazards Identification. Section 3: Composition / Information on Ingredients. Section 8: Exposure Controls / Personal Protection. Section 9: Physical and Chemical Properties. Section 11: Toxicological information on STOT (Specific Target Organ Toxicity) and CMR (Carcinogenic, Mutagenic and toxic to Reproduction). Section 16: Other Information.

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