

SAFETY DATA SHEET



ESPLANADE® 200 SC

Version 2.1 / USA
102000023686

1/10
Revision Date: 06/14/2016
Print Date: 08/08/2017

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

Product identifier

Trade name ESPLANADE® 200 SC

Product code (UVP) 79930208

SDS Number 102000023686

EPA Registration No. 432-1516

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

Use Herbicide

Restrictions on use See product label for restrictions.

Information on supplier

Supplier Bayer Environmental Science
2 T.W. Alexander Drive
Research Triangle PK, NC 27709
United States

Responsible Department Email: SDSINFO.BCS-NA@bayer.com

Emergency telephone no.

Emergency Telephone Number (24hr/ 7 days) 1-800-334-7577

Product Information Telephone Number 1-800-331-2867

SECTION 2: HAZARDS IDENTIFICATION

Classification in accordance with regulation HCS 29CFR §1910.1200

Specific target organ toxicity - repeated exposure: Category 2

Labelling in accordance with regulation HCS 29CFR §1910.1200



Signal word: Warning

Hazard statements

May cause damage to organs (Nervous system) through prolonged or repeated exposure.

Precautionary statements

Do not breathe spray.

Get medical advice/ attention if you feel unwell.

SAFETY DATA SHEET



ESPLANADE® 200 SC

Version 2.1 / USA
102000023686

2/10

Revision Date: 06/14/2016
Print Date: 08/08/2017

Dispose of contents/container in accordance with local regulation.

Hazards Not Otherwise Classified (HNOC)

No physical hazards not otherwise classified.

No health hazards not otherwise classified.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

| Hazardous Component Name | CAS-No. | Concentration % by weight |
|--------------------------|-------------|---------------------------|
| Indaziflam | 950782-86-2 | 19.05 |

SECTION 4: FIRST AID MEASURES

Description of first aid measures

| | |
|-----------------------|---|
| General advice | When possible, have the product container or label with you when calling a poison control center or doctor or going for treatment. |
| Inhalation | Move to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a physician or poison control center immediately. |
| Skin contact | Take off contaminated clothing and shoes immediately. Wash off immediately with plenty of water for at least 15 minutes. Call a physician or poison control center immediately. |
| Eye contact | Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a physician or poison control center immediately. |
| Ingestion | Call a physician or poison control center immediately. Rinse out mouth and give water in small sips to drink. DO NOT induce vomiting unless directed to do so by a physician or poison control center. Never give anything by mouth to an unconscious person. Do not leave victim unattended. |

Most important symptoms and effects, both acute and delayed

Symptoms No symptoms known or expected.

Indication of any immediate medical attention and special treatment needed

Treatment Appropriate supportive and symptomatic treatment as indicated by the patient's condition is recommended. There is no specific antidote.

SAFETY DATA SHEET



ESPLANADE® 200 SC

Version 2.1 / USA
102000023686

3/10
Revision Date: 06/14/2016
Print Date: 08/08/2017

SECTION 5: FIREFIGHTING MEASURES

Extinguishing media

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

Unsuitable 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), Nitrogen oxides (NO_x)

Advice for firefighters

Special protective equipment for firefighters Firefighters should wear NIOSH approved self-contained breathing apparatus and full protective clothing.

Further information Keep out of smoke. Fight fire from upwind position. Cool closed containers exposed to fire with water spray. Do not allow run-off from fire fighting to enter drains or water courses.

Flash point > 100 °C
Not relevant; aqueous solution

Auto-ignition temperature No data available

Lower explosion limit No data available

Upper explosion limit No data available

Explosivity Not applicable

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Precautions Keep unauthorized people away. Isolate hazard area. Avoid contact with spilled product or contaminated surfaces.

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). Collect and transfer the product into a properly labelled and tightly closed container. Clean contaminated floors and objects thoroughly, observing environmental regulations.

Additional advice Use personal protective equipment. Do not allow to enter soil, waterways or waste water canal. Do not allow product to contact non-target plants.

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.

SAFETY DATA SHEET



ESPLANADE® 200 SC

Version 2.1 / USA
102000023686

4/10

Revision Date: 06/14/2016
Print Date: 08/08/2017

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Handle and open container in a manner as to prevent spillage. Maintain exposure levels below the exposure limit through the use of general and local exhaust ventilation.

Advice on protection against fire and explosion No special precautions required.

Hygiene measures Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, using the toilet or applying cosmetics.
Remove Personal Protective Equipment (PPE) immediately after handling this product. Before removing gloves clean them with soap and water. Remove soiled clothing immediately and clean thoroughly before using again. Wash thoroughly and put on clean clothing.

Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers Store in a cool, dry place and in such a manner as to prevent cross contamination with other crop protection products, fertilizers, food, and feed. Store in original container and out of the reach of children, preferably in a locked storage area. Protect from freezing.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

| Components | CAS-No. | Control parameters | Update | Basis |
|-------------------------------|-------------|-----------------------------------|---------|----------|
| Indaziflam | 950782-86-2 | 0.14 mg/m ³ (TWA) | | OES BCS* |
| 1,2-Propanediol | 57-55-6 | 500ppb (ST ESL) | 03 2014 | TX ESL |
| 1,2-Propanediol | 57-55-6 | 100ug/m ³ (AN ESL) | 03 2014 | TX ESL |
| 1,2-Propanediol | 57-55-6 | 1000ug/m ³ (ST ESL) | 03 2014 | TX ESL |
| 1,2-Propanediol | 57-55-6 | 50ppb (AN ESL) | 03 2014 | TX ESL |
| 1,2-Propanediol (Aerosol.) | 57-55-6 | 10 mg/m ³ (TWA) | 2010 | WEEL |

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

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.

SAFETY DATA SHEET



ESPLANADE® 200 SC

Version 2.1 / USA
102000023686

5/10
Revision Date: 06/14/2016
Print Date: 08/08/2017

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| Respiratory protection | When respirators are required, select NIOSH approved equipment based on actual or potential airborne concentrations and in accordance with the appropriate regulatory standards and/or industry recommendations. |
| Hand protection | Chemical-resistant gloves (barrier laminate, butyl rubber, nitrile rubber or Viton) |
| Eye protection | Safety glasses with side-shields |
| Skin and body protection | Wear long-sleeved shirt and long pants and shoes plus socks. |
| General protective measures | Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and warm/tepid water. Keep and wash PPE separately from other laundry. |

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

| | |
|---|--|
| Appearance | white |
| Physical State | suspension |
| Odor | characteristic |
| Odour Threshold | No data available |
| pH | 7.0 - 8.5 at 1 % (23 °C) (deionized water) |
| Vapor Pressure | No data available |
| Vapor Density (Air = 1) | No data available |
| Density | ca. 1.05 g/cm ³ at 20 °C |
| Evaporation rate | No data available |
| Boiling Point | No data available |
| Melting / Freezing Point | No data available |
| Water solubility | dispersible |
| Minimum Ignition Energy | Not applicable |
| Decomposition temperature | Stable under normal conditions. |
| Partition coefficient: n-octanol/water | No data available |
| Flash point | > 100 °C Not relevant; aqueous solution |
| Auto-ignition temperature | No data available |
| Lower explosion limit | No data available |
| Upper explosion limit | No data available |
| Explosivity | Not applicable |

SAFETY DATA SHEET



ESPLANADE® 200 SC

Version 2.1 / USA
102000023686

6/10
Revision Date: 06/14/2016
Print Date: 08/08/2017

Other information Further safety related physical-chemical data are not known.

SECTION 10: STABILITY AND REACTIVITY

Reactivity

| | |
|---|--|
| Thermal decomposition | 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. |

SECTION 11: TOXICOLOGICAL INFORMATION

Exposure routes Eye contact, Inhalation, Skin Absorption, Ingestion

Immediate Effects

| | |
|-------------------|-----------------------------------|
| Skin | Harmful if absorbed through skin. |
| Ingestion | Harmful if swallowed. |
| Inhalation | Harmful if inhaled. |

Information on toxicological effects

| | |
|----------------------------------|--|
| Acute oral toxicity | LD50 (Rat) \geq 5,000 mg/kg |
| Acute inhalation toxicity | LC50 (Rabbit) > 3.624 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) |
| Sensitisation | Non-sensitizing. (Guinea pig) OECD Test Guideline 406, Buehler test |

Assessment repeated dose toxicity

Indaziflam caused neurobehavioral effects and/or neuropathological changes in subchronic studies in rats and dogs.

SAFETY DATA SHEET



ESPLANADE® 200 SC

Version 2.1 / USA
102000023686

7/10
Revision Date: 06/14/2016
Print Date: 08/08/2017

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.

ACGIH

None.

NTP

None.

IARC

None.

OSHA

None.

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.

Further information

Acute toxicity studies have not been performed on this product as formulated.

Acute toxicity studies have been bridged from a similar formulation(s).

The non-acute information pertains to the active ingredient(s).

SECTION 12: ECOLOGICAL INFORMATION

| | |
|--|--|
| Toxicity to aquatic invertebrates | EC50 (Daphnia magna (Water flea)) 149 mg/l Exposure time: 48 h |
| Toxicity to aquatic plants | EC50 (Raphidocelis subcapitata (freshwater green alga)) 0.75 mg/l Exposure time: 72 h |
| Biodegradability | Indaziflam: Not rapidly biodegradable |
| Koc | Indaziflam: Koc: 496 |
| Bioaccumulation | Indaziflam: Bioconcentration factor (BCF) 66 Does not bioaccumulate. |
| Mobility in soil | Indaziflam: Moderately mobile in soils |
| Additional ecological information | No other effects to be mentioned. |

SAFETY DATA SHEET



ESPLANADE® 200 SC

Version 2.1 / USA
102000023686

8/10
Revision Date: 06/14/2016
Print Date: 08/08/2017

Environmental precautions Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark.
Do not contaminate surface or ground water by cleaning equipment or disposal of wastes, including equipment wash water.
Drift and runoff from treated areas may be hazardous to aquatic organisms in adjacent sites.
Apply this product as specified on the label.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods

Product Do not contaminate water, food, or feed by disposal.
Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law.
If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

Contaminated packaging Do not re-use empty containers.
Triple rinse containers.
Puncture container to avoid re-use.
Dispose of empty container in a sanitary landfill or by incineration, or, if allowed by State/Provincial and local authorities, by burning.
If burned, stay out of smoke.
Follow advice on product label and/or leaflet.

RCRA Information Characterization and proper disposal of this material as a special or hazardous waste is dependent upon Federal, State and local laws and are the user's responsibility. RCRA classification may apply.

SECTION 14: TRANSPORT INFORMATION

49CFR Not dangerous goods / not hazardous material

IMDG

| | |
|----------------------|---|
| UN number | 3082 |
| Class | 9 |
| Packaging group | III |
| Marine pollutant | YES |
| Proper shipping name | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (INDAZIFLAM SOLUTION) |

IATA

| | |
|-----------------|-------------|
| UN number | 3082 |
| Class | 9 |
| Packaging group | III |

SAFETY DATA SHEET



ESPLANADE® 200 SC

Version 2.1 / USA
102000023686

9/10
Revision Date: 06/14/2016
Print Date: 08/08/2017

| | |
|--------------------------|--|
| Environm. Hazardous Mark | YES |
| Proper shipping name | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (INDAZIFLAM SOLUTION) |

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.

SECTION 15: REGULATORY INFORMATION

EPA Registration No. 432-1516

US Federal Regulations

TSCA list

None.

US. Toxic Substances Control Act (TSCA) Section 12(b) Export Notification (40 CFR 707, Subpt D)

None.

SARA Title III - Section 302 - Notification and Information

None.

SARA Title III - Section 313 - Toxic Chemical Release Reporting

None.

US States Regulatory Reporting

CA Prop65

This product does not contain any substances known to the State of California to cause cancer.

This product does not contain any substances known to the State of California to cause reproductive harm.

US State Right-To-Know Ingredients

None.

Canadian Regulations

Canadian Domestic Substance List

None.

Environmental

CERCLA

None.

Clean Water Section 307 Priority Pollutants

None.

Safe Drinking Water Act Maximum Contaminant Levels

None.

EPA/FIFRA Information:

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information required on the pesticide label:

SAFETY DATA SHEET



ESPLANADE® 200 SC

Version 2.1 / USA
102000023686

10/10
Revision Date: 06/14/2016
Print Date: 08/08/2017

Signal word: Caution!

Hazard statements: Harmful if swallowed, inhaled or absorbed through the skin.
Avoid contact with skin, eyes and clothing.
Avoid breathing spray mist.

SECTION 16: OTHER INFORMATION

Abbreviations and acronyms

| | |
|---------|---|
| 49CFR | Code of Federal Regulations, Title 49 |
| ACGIH | US. ACGIH Threshold Limit Values |
| ATE | Acute toxicity estimate |
| CAS-Nr. | Chemical Abstracts Service number |
| CERCLA | Comprehensive Environmental Response, Compensation, and Liability Act |
| EINECS | European inventory of existing commercial substances |
| ELINCS | European list of notified chemical substances |
| IARC | International Agency for Research on Cancer |
| IATA | International Air Transport Association |
| IMDG | International Maritime Dangerous Goods |
| N.O.S. | Not otherwise specified |
| NTP | US. National Toxicology Program (NTP) Report on Carcinogens |
| OECD | Organization for Economic Co-operation and Development |
| TDG | Transportation of Dangerous Goods |
| TWA | Time weighted average |
| UN | United Nations |
| WHO | World health organisation |

NFPA 704 (National Fire Protection Association):

Health - 1 Flammability - 1 Instability - 0 Others - none

HMIS (Hazardous Materials Identification System, based on the Third Edition Ratings Guide)

Health - 1 Flammability - 1 Physical Hazard - 0 PPE -

0 = minimal hazard, 1 = slight hazard, 2 = moderate hazard, 3 = severe hazard, 4 = extreme hazard

Reason for Revision: The following sections have been revised: Section 11: Toxicological Information.

Revision Date: 06/14/2016

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