

SAFETY DATA SHEET



ESPLANADE® SURE

Version 2.0 / USA
102000037646

1/13
Revision Date: 03/06/2023
Print Date: 03/15/2023

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

Product identifier

Trade name	ESPLANADE® SURE
Product code (UVP)	86699729
SDS Number	102000037646
EPA Registration No.	432-1604

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 CropScience LP 800 North Lindbergh Blvd. St. Louis, MO 63167 USA
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	1-866-99BAYER (1-866-992-2937)

SECTION 2: HAZARDS IDENTIFICATION

Classification in accordance with regulation HCS 29CFR §1910.1200

Carcinogenicity: Category 1B
Specific target organ toxicity - repeated exposure: Category 2
Specific target organ toxicity - single exposure: Category 2
Eye irritation: Category 2B
Acute toxicity(Oral): Category 4
Acute toxicity(Inhalation): Category 4

Labelling in accordance with regulation HCS 29CFR §1910.1200



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Signal word: Danger

Hazard statements

May cause cancer.
May cause damage to organs (Nervous system) through prolonged or repeated exposure.
May cause damage to organs.
Causes eye irritation.
Harmful if swallowed or if inhaled.

Precautionary statements

Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Wear protective gloves/protective clothing/eye protection/face protection.
Do not breathe dust.
Wash thoroughly after handling.
Do not eat, drink or smoke when using this product.
Use only outdoors or in a well-ventilated area.
IF exposed or concerned: Get medical advice/ attention.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice/ attention.
IF SWALLOWED: Call a POISON CENTER/doctor/physician if you feel unwell.
Rinse mouth.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
Call a POISON CENTER/doctor/physician if you feel unwell.
Store locked up.
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	24.3
Rimsulfuron	122931-48-0	16.7
Naphthalene and alkyl naphthalene sulphonic acids formaldehyde condensate, sodium salt	68425-94-5	10.0
Reaction product of naphthalene, propan-2-ol, sulfonated and neutralized by caustic soda	1322-93-6	5.0
Crystalline quartz (respirable)	14808-60-7	0.2

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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 To date no symptoms are known.

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.

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 Dangerous gases are evolved in the event of a fire.

Advice for firefighters

Special protective equipment for firefighters In the event of fire and/or explosion do not breathe fumes. Firefighters should wear NIOSH approved self-contained breathing apparatus and full protective clothing.

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

Specific hazards from the substance or mixture which can increase the fire

Flash point	No data available
Auto-ignition temperature	No data available
Lower explosion limit	No data available
Upper explosion limit	No data available
Explosivity	Not explosive Regulation (EC) No. 440/2008, Annex, A.14

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Precautions Avoid dust formation. 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 Avoid dust formation. Sweep up or vacuum up spillage and collect in suitable container for disposal. Clean contaminated floors and objects thoroughly, observing environmental regulations.

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

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

Precautions for safe handling

Advice on safe handling Use only in area provided with appropriate exhaust ventilation. Avoid dust formation. Handle and open container in a manner as to prevent spillage.

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. Remove soiled clothing immediately and clean

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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. Keep away from direct sunlight.

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

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Components	CAS-No.	Control parameters	Update	Basis
Indaziflam	950782-86-2	0.56 mg/m3 (TWA)		OES BCS*
Crystalline quartz (respirable) (Respirable dust.)	14808-60-7	0.05 mg/m3 (TWA PEL)	10 2016	US CA OEL
Crystalline quartz (respirable) (Respirable.)	14808-60-7	0.1 mg/m3 (TWA)	2000	Z3
Crystalline quartz (respirable)	14808-60-7	0.05 mg/m3 (TWA)	03 2016	OSHA
Crystalline quartz (respirable)	14808-60-7	0.025 mg/m3 (OSHA_ACT)	03 2016	OSHA
Crystalline quartz (respirable) (Respirable dust.)	14808-60-7	0.05 mg/m3 (REL)	2016	NIOSH
Crystalline quartz (respirable) (Respirable.)	14808-60-7	2.4millions of particles per cubic foot of air (TWA)	2000	Z3
Crystalline quartz (respirable) (Respirable dust.)	14808-60-7	0.050 mg/m3 (TWA)	01 2019	TN OEL
Crystalline quartz (respirable) (Respirable dust.)	14808-60-7	0.05 mg/m3 (PEL)	03 2016	OSHA Z1
Crystalline quartz	14808-60-7	0.025 mg/m3	01 2022	ACGIH

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(respirable)		(TWA)		
(Respirable fraction.)				

*OES BCS: Internal Bayer AG, Crop Science Division "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.

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	Tightly fitting safety goggles
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

Information on basic physical and chemical properties

Form	water-dispersible granules
Colour	beige
Odour	characteristic
Odour Threshold	No data available
pH	4.8 - 6.8 (10 %) (23 °C) (deionized water)
Melting point/range	No data available
Boiling Point	No data available
Flash point	No data available
Flammability	No data available
Auto-ignition temperature	No data available
Thermal decomposition	No data available
Ignition temperature	358 °C / 676.4 °F
Minimum ignition energy	No data available
Self-accelarating	No data available

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decomposition temperature (SADT)

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	No data available
Bulk density	0.57 - 0.67 g/ml (loose)
Water solubility	dispersible
Partition coefficient: n-octanol/water	Indaziflam: log Pow: 3.7 (20 °C) (pH 7) Rimsulfuron: log Pow: 0.288 (25 °C) (pH 5)
Viscosity, dynamic	No data available
Viscosity, kinematic	No data available
Oxidizing properties	No data available
Explosivity	Not explosive Regulation (EC) No. 440/2008, Annex, A.14
Dust content	
Other information	Further safety related physical-chemical data are not known.

SECTION 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	No incompatible materials known.
Hazardous decomposition products	No decomposition products expected under normal conditions of use.

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SECTION 11: TOXICOLOGICAL INFORMATION

Exposure routes Eye contact, Ingestion, Skin contact, Inhalation

Immediate Effects

Eye May cause temporary eye irritation.

Skin May be harmful in contact with skin.

Ingestion Harmful if swallowed.

Inhalation May be harmful if inhaled.

Information on toxicological effects

Acute oral toxicity LD50 (female Rat) 1,098 mg/kg

Acute inhalation toxicity LC50 (male/female combined Rat) > 2.17 mg/l
Exposure time: 4 h
Determined in the form of dust.
highest concentration tested

Acute dermal toxicity

Dermal toxicity was assessed based on the result of the oral toxicity study.
Dermal toxicity study has been waived by competent regulatory authority.

Skin corrosion/irritation Slight irritant effect - does not require labelling. (Rabbit)

Serious eye damage/eye irritation Mild eye irritation. (Rabbit)

Respiratory or skin sensitisation Skin: 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.
Rimsulfuron: Based on available data, the classification criteria are not met.

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.

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

Assessment mutagenicity

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

Assessment carcinogenicity

Indaziflam was not carcinogenic in lifetime feeding studies in rats and mice.
Rimsulfuron: Based on available data, the classification criteria are not met.

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Crystalline quartz (respirable) 14808-60-7 Group A2

NTP

Crystalline quartz (respirable) 14808-60-7

IARC

Crystalline quartz (respirable) 14808-60-7 Overall evaluation: 1

Assessment toxicity to reproduction

Indaziflam was not a primary reproductive toxicant in a two-generation study in rats.
Rimsulfuron: Based on available data, the classification criteria are not met.

Assessment developmental toxicity

Indaziflam did not cause developmental toxicity in rats and rabbits.
Rimsulfuron: Based on available data, the classification criteria are not met.

Aspiration hazard

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

Further information

Only acute toxicity studies have been performed on the formulated product.
The non-acute information pertains to the active ingredient(s).

SECTION 12: ECOLOGICAL INFORMATION

Toxicity to fish LC50 (Oncorhynchus mykiss (rainbow trout)) 0.572 mg/l
Exposure time: 96 h
The value mentioned relates to the active ingredient indaziflam.

Toxicity to aquatic invertebrates EC50 (Daphnia magna (Water flea)) > 9.88 mg/l
Exposure time: 48 h
The value mentioned relates to the active ingredient indaziflam.

Toxicity to aquatic plants IC50 (Raphidocelis subcapitata (freshwater green alga)) 0.134 mg/l
Growth rate; Exposure time: 96 h
The value mentioned relates to the active ingredient indaziflam.

Biodegradability Indaziflam:
Not rapidly biodegradable
Rimsulfuron:
Not readily biodegradable.

Koc Indaziflam: Koc: 496

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

Mobility in soil Indaziflam: Moderately mobile in soils

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Rimsulfuron: Mobile in soils

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).
Rimsulfuron: 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).

Additional ecological information No other effects to be mentioned.

Environmental precautions Do not allow to get into surface water, drains and ground water.
Do not contaminate surface or ground water by cleaning equipment or disposal of wastes, including equipment wash water.
Drift or runoff from treated areas may adversely affect non-target plants.
Do not apply when weather conditions favor runoff or drift.
Apply this product as specified on the label.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods

Product Dispose in accordance with all local, state/provincial and federal regulations.
Pesticide, spray mixture or rinse water that cannot be used according to label instructions may be disposed of on site or at an approved waste disposal facility.

Contaminated packaging Consult state and local regulations regarding the proper disposal of container.
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 **3077**
Class **9**
Packaging group **III**
Marine pollutant **YES**
Proper shipping name **ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (INDAZIFLAM MIXTURE)**

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IATA

UN number	3077
Class	9
Packaging group	III
Environm. Hazardous Mark	YES
Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (INDAZIFLAM MIXTURE)

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. 432-1604

US Federal Regulations

TSCA list

Kaolin	1332-58-7
Alkylated Naphthalene sulfonate, sodium salt	68425-94-5
Water	7732-18-5
Reaction product of naphthalene, propan-2-ol, sulfonated and neutralized by caustic soda	1322-93-6
Starch	9005-25-8
Polyvinylpyrrolidone	9003-39-8
Polysiloxanes, di-Me	63148-62-9

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

No export notification needs to be made.

SARA Title III - Section 302 - Notification and Information

Not applicable.

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.

WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Crystalline quartz (respirable)	14808-60-7	Carcinogenic.
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US State Right-To-Know Ingredients

Indaziflam	950782-86-2	CT
Kaolin	1332-58-7	MN, RI
Synthetic amorphous silica	112926-00-8	CA, CT, MN, RI

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Starch
Polyvinylpyrrolidone

9005-25-8
9003-39-8

MN, RI
CA

Environmental

CERCLA

None.

Clean Water Section 307(a)(1)

None.

Safe Drinking Water Act Maximum Contaminant Levels

None.

EPA/FIFRA Information:

This chemical is a pesticide product regulated 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:

Signal word:

Caution!

Hazard statements:

Harmful if swallowed or absorbed through skin.
Causes moderate eye irritation.

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

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NFPA 704 (National Fire Protection Association):

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

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

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

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

* = chronic health hazard

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. Section 15: Regulatory information. Section 16: Other Information. Reviewed and updated for general editorial purposes.

Revision Date: 03/06/2023

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