

Revision Date: 05/22/2020

Print Date: 05/23/2020

SPECTICLE® G

Version 2.0 / CDN 102000029955

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

Product identifier

Trade name SPECTICLE® G

Product code (UVP) 84118273

SDS Number 102000029955

PCP Registration No. 32804

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

Use Herbicide

Restrictions on useSee product label for restrictions.

Information on supplier

Supplier Bayer CropScience Inc

#200, 160 Quarry Park Blvd, SE Calgary, Alberta T2C 3G3

Canada

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

1-888-283-6847

SECTION 2: HAZARDS IDENTIFICATION

Classified in accordance with Part 2 of the Hazardous Products Regulations

Acute toxicity(Inhalation): Category 4 Carcinogenicity: Category 1B

Labelling in accordance with Part 3 of the Hazardous Products Regulations





Signal word: Danger

Hazard statements
Harmful if inhaled.
May cause cancer.



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Precautionary statements

Avoid breathing dust.

Use only outdoors or in a well-ventilated area.

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.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Call a POISON CENTER/doctor/physician if you feel unwell.

IF exposed or concerned: Get medical advice/ attention.

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 | 0.0224 | |
| Propyl-S-(-)-2-Hydroxy Propionate | 53651-69-7 | 1.1 | |
| 2-methylpentane-2,4-diol | 107-41-5 | 2.0 | |
| Crystalline quartz (respirable) | 14808-60-7 | 0.96 | |

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



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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 Water spray, Carbon dioxide (CO2), Dry powder, Foam

Unsuitable High volume water jet

Special hazards arising

from the substance or

mixture

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.

Dangerous gases are evolved in the event of a fire.

Flash point Not applicable

Auto-ignition temperatureNo data availableLower explosion limitNot applicableUpper explosion limitNot applicableExplosivityNo data available

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 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. If the product is accidentally

spilled, do not allow to enter soil, waterways or waste water canal. Do

not allow product to contact non-target plants.



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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

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. 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.

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* |
| 2-methylpentane-2,4-diol | 107-41-5 | 121 mg/m3/25 ppm (CEILING) | 07 2009 | CAD AB OEL |
| 2-methylpentane-2,4-diol | 107-41-5 | 25 ppm (CEILING) | 09 2011 | CAD BC OEL |
| 2-methylpentane-2,4-diol (Vapor fraction) | 107-41-5 | 50 ppm (STEL) | 03 2017 | CAD MB OEL |
| 2-methylpentane-2,4-diol (Vapor fraction) | 107-41-5 | 25 ppm (TWA) | 03 2017 | CAD MB OEL |
| 2-methylpentane-2,4-diol (Aerosol, inhalable.) | 107-41-5 | 10 mg/m3 (STEL) | 03 2017 | CAD MB OEL |
| 2-methylpentane-2,4-diol | 107-41-5 | 25 ppm | 11 2010 | CAD ON |



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| | | (CEV) | | OEL |
|---------------------------------|------------|-------------------------------|---------|---------------|
| 2-methylpentane-2,4-diol | 107-41-5 | 25 ppm (CEILING) | 05 2009 | CAD SK OEL |
| 2-methylpentane-2,4-diol | 107-41-5 | 121 mg/m3/25 ppm (CEILING) | 09 2017 | OEL (QUE) |
| Crystalline quartz (respirable) | 14808-60-7 | 0.025 mg/m3 (TWA) | 07 2009 | CAD AB OEL |
| (Respirable particles.) | | | | |
| Crystalline quartz (respirable) | 14808-60-7 | 0.025 mg/m3 (TWA) | 09 2011 | CAD BC OEL |
| (Respirable fraction.) | | | | |
| Crystalline quartz (respirable) | 14808-60-7 | 0.025 mg/m3 (TWA) | 03 2011 | CAD MB OEL |
| (Respirable fraction.) | | | | |
| Crystalline quartz (respirable) | 14808-60-7 | 0.10 mg/m3 (TWA) | 06 2015 | CAD ON OEL |
| (Respirable fraction.) | | | | |
| Crystalline quartz (respirable) | 14808-60-7 | 0.05 mg/m3 (8 HR ACL) | 05 2009 | CAD SK OEL |
| (Respirable fraction.) | | | | |
| Crystalline quartz (respirable) | 14808-60-7 | 0.1 mg/m3 (TWA) | 09 2017 | OEL (QUE) |
| (Respirable dust.) | | | | |

^{*}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 nitrile rubber gloves

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.



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Odour Threshold

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Keep and wash PPE separately from other laundry.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearancegrey to tanPhysical Stategranular

Odor characteristic

pH ca. 4 - 7 (10 %)

Viscosity, kinematic No data available

Vapor Pressure No data available

Vapor Density (Air = 1) No data available

Density No data available

Bulk density 45 - 55 lb/ft³
Evaporation rate Not applicable
Boiling Point Not applicable
Melting / Freezing Point Not applicable
Water solubility dispersible

Minimum Ignition Energy No data available

Decomposition temperature

Stable under normal conditions.

Self-accelarating

decomposition temperature

(SADT)

No data available

No data available

Partition coefficient: n-

octanol/water

Not applicable

Flammability
No data available
Flash point
Not applicable
Auto-ignition temperature
Lower explosion limit
Upper explosion limit
Not applicable
Upper explosion limit
Not applicable
No data available
Particle size
No data available



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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 No incompatible materials known.

Hazardous decomposition

products

No decomposition products expected under normal conditions of use.

SECTION 11: TOXICOLOGICAL INFORMATION

Exposure routes Inhalation, Eye contact, Skin contact, Ingestion

Immediate Effects

Eye May cause mild irritation to eyes.

Skin May cause mild irritation to the skin.

Information on toxicological effects

Acute oral toxicity LD50 (Rat) > 5,000 mg/kg
Acute inhalation toxicity LC50 (Rat) > 2.09 mg/l

Exposure time: 4 h

Determined in the form of liquid aerosol.

highest concentration tested

LC50 (Rat) > 8.36 mg/l Exposure time: 1 h

Determined in the form of liquid aerosol.

Extrapolated from the 4 hr LC50.

Acute dermal toxicity LD50 (Rat) > 5,000 mg/kg

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

Serious eye damage/eye

irritation

Minimally irritating. (Rabbit)

Respiratory or skin

sensitisation

Skin: Non-sensitizing. (Guinea pig)

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



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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.

ACGIH

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

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.

Aspiration hazard

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

Further information

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 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

EC50 (Daphnia magna (Water flea)) > 9.88 mg/l

invertebrates 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.



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Toxicity to other organisms LD50 (Eisenia fetida (earthworms)) > 1,000 mg/kg

Exposure time: 14 d

The value mentioned relates to the active ingredient indaziflam.

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

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.

Apply this product as specified on the label.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods

Product 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.

Dispose in accordance with all local, state/provincial and federal

regulations.

Contaminated packaging Do not re-use empty containers.

Completely empty container into application equipment, then dispose of

empty container in a sanitary landfill, by incineration or by other procedures approved by state/provincial and local authorities.

If burned, stay out of smoke.

Follow advice on product label and/or leaflet.

SECTION 14: TRANSPORT INFORMATION

TDG

UN number 3077
Labels 9
Packaging group III

Marine pollutant Marine pollutant

Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,

N.O.S.

(INDAZIFLAM)

49CFR Not dangerous goods / not hazardous material

IMDG

UN number 3077



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Class 9
Packaging group III
Marine pollutant YES

Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,

NOS

(INDAZIFLAM MIXTURE)

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.

Further Information Exempt from regulation when transported by road or rail, in

accordance with TDG Regulations 1.45.1.

This exemption provides that this product does not require dangerous goods shipping documentation or safety marks

when transported on land by road or rail.

SECTION 15: REGULATORY INFORMATION

PCP Registration No. 32804

PMRA Information:

Read the label, authorized under the Pest Control Products Act, prior to using or handling the pest control product.

This chemical is a pest control product regulated by Health Canada Pest Management Regulatory Agency and is subject to certain labelling requirements under the Pest Control Products Act. These requirements differ from the classification criteria and hazard information required for GHS-consistent safety data sheets. The following is the hazard information required on the pest control product label:

Hazard statements: Harmful if swallowed, inhaled or absorbed through the skin.

There are Canada-specific environmental requirements for handling, use, and disposal of this pest control product that are indicated on the label.



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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 2: Hazards Identification. Section 3: Composition / Information on Ingredients. Section 8: Exposure Controls / Personal Protection. Section 11: Toxicological Information. Section 14: Transport Information. Section 15: Regulatory information. Reviewed and updated for general editorial purposes.

Prepared by the HSE Department of Bayer CropScience Inc. (306)-721-0310.

Revision Date: 05/22/2020

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