

# FORBID® 240 SC INSECTICIDE/MITICIDE

Version 3.0 / CDN Revision Date: 01/18/2022 102000008393 Print Date: 04/03/2024

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

**Product identifier** 

Trade name FORBID® 240 SC INSECTICIDE/MITICIDE

Product code (UVP) 06274919

**SDS Number** 102000008393

**PCP** Registration No. 28590

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

Use Insecticide, Miticide

Restrictions on use See 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

This material is not hazardous under the criteria of Part 2 of the Hazardous Products 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

Spiromesifen 283594-90-1 23.1



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

**Unsuitable** High volume water jet

Special hazards arising from the substance or

Dangerous gases are evolved in the event of a fire.

mixture

Advice for firefighters

Special protective Firefighters should wear NIOSH approved self-contained breathing

**equipment for firefighters** 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.



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Flash point >93.4 °C

Auto-ignition temperature405 °C / 761 °FLower explosion limitNo data availableUpper explosion limitNo data availableExplosivityNo 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 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. 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 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.

**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



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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.

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
Spiromesifen	283594-90-1	0.92 mg/m3		OES BCS*
		(SK-SEN)		

<sup>\*</sup>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** 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**

#### Information on basic physical and chemical properties

Form suspension

Colour white to light grey

**Odor** musty earthy

**pH** 3.5 - 4.5 (100 %) (23 °C)

Melting point/range -18 °C / 0.4- °F



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**Boiling Point** No data available

Flash point > 93.4 °C

**Flammability** No data available 405 °C / 761 °F **Auto-ignition temperature** 

Minimum ignition energy No data available **Self-accelarating** 

decomposition temperature

(SADT)

No data available

**Upper explosion limit** No data available Lower explosion limit No data available **Vapor Pressure** No data available **Evaporation rate** No data available Relative vapour density No data available Relative density No data available 1.05 g/cm3 (20 °C) **Density** 

Water solubility dispersible

Partition coefficient: n-

octanol/water

Spiromesifen: log Pow: 4.55 (20 °C)

Viscosity, dynamic 600 - 1,100 cps (25 °C)

Viscosity, kinematic No data available **Explosivity** No data available

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.



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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 Ingestion, Eye contact, Skin Absorption, Inhalation

**Immediate Effects** 

Eye Causes eye irritation.

Skin May be harmful if absorbed through skin.

Ingestion May be harmful if swallowed. Inhalation May be harmful if inhaled.

Information on toxicological effects

Acute oral toxicity LD50 (Rat) > 2,000 mg/kg

Acute inhalation toxicity LC50 (Rat) > 2.8 mg/l

Exposure time: 4 h

Determined in the form of liquid aerosol.

Highest attainable concentration.

No deaths

Acute dermal toxicity LD50 (Rat) > 4,000 mg/kgSkin corrosion/irritation No skin irritation (Rabbit) Serious eye damage/eye No eye irritation (Rabbit)

irritation

Respiratory or skin

sensitisation

Skin: Non-sensitizing. (Guinea pig)

#### Assessment STOT Specific target organ toxicity - single exposure

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

#### Assessment STOT Specific target organ toxicity - repeated exposure

Spiromesifen did not cause specific target organ toxicity in experimental animal studies.

### Assessment mutagenicity

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

#### Assessment carcinogenicity

Spiromesifen was not carcinogenic in lifetime feeding studies in rats and mice.

#### **ACGIH**

None.



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**NTP** 

None.

**IARC** 

None.

**ACGIH** 

None.

**NTP** 

None.

**IARC** 

None.

**OSHA** 

None.

## Assessment toxicity to reproduction

Spiromesifen caused reproduction toxicity in a two-generation study in rats only at dose levels also toxic to the parent animals. The reproduction toxicity seen with Spiromesifen is related to parental toxicity.

#### Assessment developmental toxicity

Spiromesifen caused developmental toxicity only at dose levels toxic to the dams. The developmental effects seen with Spiromesifen are related to maternal toxicity.

#### **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)) 0.0155 mg/l

Exposure time: 96 h

The value mentioned relates to the active ingredient spiromesifen.

Toxicity to aquatic

invertebrates

EC50 (Daphnia magna (Water flea)) > 0.0923 mg/l

Exposure time: 48 h

The value mentioned relates to the active ingredient spiromesifen.

**Toxicity to aquatic plants** IC50 (Raphidocelis subcapitata (freshwater green alga)) > 0.094 mg/l

Growth rate; Exposure time: 72 h

The value mentioned relates to the active ingredient spiromesifen.

Biodegradability Spiromesifen:



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Not rapidly biodegradable

**Koc** Spiromesifen: Koc: 30900

**Bioaccumulation** Spiromesifen: Bioconcentration factor (BCF) 545

Does not bioaccumulate.

Mobility in soil Spiromesifen: Immobile in soil

Results of PBT and vPvB assessment

**PBT and vPvB assessment** Spiromesifen: 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).

**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.

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.

It is best to use all of the product in accordance with label directions. If it is necessary to dispose of unused product, please follow container label

instructions and applicable local guidelines.

Contaminated packaging Consult state and local regulations regarding the proper disposal of

container.

Follow advice on product label and/or leaflet.

#### **SECTION 14: TRANSPORT INFORMATION**

**TDG** 

UN number 3082
Labels 9
Packaging group III

Marine pollutant Marine pollutant

Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S.

(SPIROMESIFEN)

49CFR Not dangerous goods / not hazardous material

**IMDG** 

UN number 3082
Class 9
Packaging group III



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Marine pollutant YES

Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S.

(SPIROMESIFEN SOLUTION)

**IATA** 

UN number 3082
Class 9
Packaging group III
Environm. Hazardous Mark YES

Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S.

(SPIROMESIFEN 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.

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.

Freight Classification: INSECTICIDES OR FUNGICIDES O/T POISON

INSECTICIDES OR FUNGICIDES, N.O.I., OTHER THAN

**POISON** 

## **SECTION 15: REGULATORY INFORMATION**

PCP Registration No. 28590

### **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:



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Signal word: Caution!

**Hazard statements:** May be harmful by inhalation, ingestion, skin absorption.

Causes eye irritation.

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

#### **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 - 1 Others - none

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

Health - 1 Flammability - 1 Physical Hazard - 1 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.

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

**Revision Date: 01/18/2022** 

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

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