

SAFETY DATA SHEET



TOPCHOICE® INSECTICIDE

Version 4.0 / USA
102000012961

1/11
Revision Date: 04/11/2019
Print Date: 04/12/2019

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

Product identifier

Trade name TOPCHOICE® INSECTICIDE

Product code (UVP) 05727986

SDS Number 102000012961

EPA Registration No. 432-1217

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

Use Insecticide

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
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 1-800-331-2867

SECTION 2: HAZARDS IDENTIFICATION

Classification in accordance with regulation HCS 29CFR §1910.1200

Specific target organ toxicity - single exposure: Category 3

Labelling in accordance with regulation HCS 29CFR §1910.1200



Signal word: Warning

Hazard statements

May cause respiratory irritation.

Precautionary statements

Avoid breathing dust.

Use only outdoors or in a well-ventilated area.

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

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Call a POISON CENTER/doctor/physician if you feel unwell.
Store in a well-ventilated place. Keep container tightly closed.
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 |
|--------------------------|-------------|---------------------------|
| Fipronil | 120068-37-3 | 0.0143 |

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 symptoms persist, call a physician. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. |
| Skin contact | Take off contaminated clothing and shoes immediately. Wash off immediately with plenty of water for at least 15 minutes. Get medical attention if irritation develops and persists. |
| 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. Get medical attention if irritation develops and persists. |
| Ingestion | Call a physician or poison control center immediately. DO NOT induce vomiting unless directed to do so by a physician or poison control center. Rinse out mouth and give water in small sips to drink. Never give anything by mouth to an unconscious person. Do not leave victim unattended. |

Most important symptoms and effects, both acute and delayed

Symptoms Symptoms of Overexposure, Lethargy, Tremors, Convulsions

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.

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SECTION 5: FIREFIGHTING MEASURES

Extinguishing media

Suitable Water spray, Foam, Dry chemical, Carbon dioxide (CO₂)

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 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 Not applicable

Auto-ignition temperature No data available

Lower explosion limit Not applicable

Upper explosion limit Not applicable

Explosivity No 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. Avoid dust formation.

Methods and materials for containment and cleaning up

Methods for cleaning up Avoid dust formation. 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.

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SECTION 7: HANDLING AND STORAGE

Precautions for safe handling

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

Advice on protection against fire and explosion Dust may form explosive mixture in air. Take measures to prevent the build up of electrostatic charge. Keep away from heat and sources of ignition.

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 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 original container and out of the reach of children, preferably in a locked storage area. 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.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

| Components | CAS-No. | Control parameters | Update | Basis |
|------------|-------------|----------------------------------|--------|----------|
| Fipronil | 120068-37-3 | 0.035 mg/m ³ (TWA) | | OES BCS* |

*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 Waterproof 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

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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 | light grey to brown |
| Physical State | granular |
| Odor | odourless |
| Odour Threshold | No data available |
| pH | 8.1 (1 %) |
| Vapor Pressure | No data available |
| Vapor Density (Air = 1) | Not applicable |
| Bulk density | 46 - 50 lbs/cu.ft. |
| Evaporation rate | Not applicable |
| Boiling Point | Not applicable |
| Melting / Freezing Point | Not applicable |
| Water solubility | dispersible |
| Minimum Ignition Energy | No data available |
| Decomposition temperature | No data available |
| Partition coefficient: n-octanol/water | No data available |
| Viscosity | Not applicable |
| Flash point | Not applicable |
| Auto-ignition temperature | No data available |
| Lower explosion limit | Not applicable |
| Upper explosion limit | Not applicable |
| Explosivity | No data available |

SECTION 10: STABILITY AND REACTIVITY

| | |
|------------------------------|--|
| Reactivity | |
| Thermal decomposition | No data available |
| Chemical stability | Stable under recommended storage conditions. |

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| | |
|---|--|
| Possibility of hazardous reactions | No hazardous reactions when stored and handled according to prescribed instructions. |
| Conditions to avoid | Extremes of temperature and direct sunlight. Heat, flames and sparks. |
| Incompatible materials | Strong acids, Strong bases, Strong oxidizing agents |
| Hazardous decomposition products | Thermal decomposition can lead to release of: Carbon oxides Sulphur compounds |

SECTION 11: TOXICOLOGICAL INFORMATION

| | |
|---|--|
| Exposure routes | Ingestion, Eye contact, Skin Absorption, Inhalation |
| Immediate Effects | |
| Eye | Causes eye irritation. |
| Skin | Harmful if absorbed through skin. |
| Inhalation | No specific effects on humans are known under normal use conditions. |
| Information on toxicological effects | |
| Acute oral toxicity | LD50 (male/female combined Rat) > 5,000 mg/kg |
| Acute inhalation toxicity | LC50 (male/female combined Rat) > 5.16 mg/l Exposure time: 4 h Determined in the form of dust. (actual) Test conducted with a similar formulation. |
| Acute dermal toxicity | LD50 (male/female combined Rabbit) > 2,000 mg/kg |
| Skin corrosion/irritation | No skin irritation (Rabbit) |
| Serious eye damage/eye irritation | Mild eye irritation. (Rabbit) |
| Respiratory or skin sensitisation | Skin: Non-sensitizing. (Guinea pig) |

Assessment STOT Specific target organ toxicity – repeated exposure

Fipronil caused specific target organ toxicity in experimental animal studies in the following organ(s): Liver. Fipronil caused neurobehavioral effects and/or neuropathological changes in animal studies.

Assessment mutagenicity

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

Assessment carcinogenicity

Fipronil caused an increased incidence of tumours in rats in the following organ(s): Thyroid. The mechanism that triggers tumours in rodents and the type of tumours observed are not relevant to

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humans.

ACGIH

None.

NTP

None.

IARC

None.

OSHA

None.

Assessment toxicity to reproduction

Fipronil 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 Fipronil is related to parental toxicity.

Assessment developmental toxicity

Fipronil did not cause developmental toxicity in rats and rabbits.

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 (Lepomis macrochirus (Bluegill sunfish)) = 0.0852 mg/l
Exposure time: 96 h
The value mentioned relates to the active ingredient fipronil.

Chronic toxicity to fish Cyprinodon variegatus (sheepshead minnow)
Early-life Stage
NOEC: = 0.0029 mg/l
Exposure time: 35 d
The value mentioned relates to the active ingredient fipronil.
Oncorhynchus mykiss (rainbow trout)
Early-life Stage
NOEC: = 0.015 mg/l
Exposure time: 90 d
The value mentioned relates to the active ingredient fipronil.

Toxicity to aquatic invertebrates EC50 (Daphnia magna (Water flea)) = 0.19 mg/l
Exposure time: 48 h
The value mentioned relates to the active ingredient fipronil.

LC50 (Mysidopsis bahia (mysid shrimp)) = 0.00014 mg/l
Exposure time: 96 h
The value mentioned relates to the active ingredient fipronil.

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|--|---|
| Chronic toxicity to aquatic invertebrates | <p>NOEC (Mysidopsis bahia (mysid shrimp)): = 0.0077 µg/l Life Cycle; Exposure time: 28 d The value mentioned relates to the active ingredient fipronil.</p> <p>NOEC (Daphnia magna (Water flea)): = 0.0098 mg/l Exposure time: 21 d The value mentioned relates to the active ingredient fipronil.</p> |
| Toxicity to aquatic plants | <p>EC50 (Desmodesmus subspicatus (green algae)) = 0.068 mg/l Exposure time: 96 h The value mentioned relates to the active ingredient fipronil.</p> <p>NOEC (Desmodesmus subspicatus (green algae)) = 0.040 mg/l Exposure time: 96 h The value mentioned relates to the active ingredient fipronil.</p> <p>NOEC (Lemna gibba (gibbous duckweed)) = 0.16 mg/l Exposure time: 14 d The value mentioned relates to the active ingredient fipronil.</p> |
| Biodegradability | <p>Fipronil: Not rapidly biodegradable</p> |
| Koc | <p>Fipronil: Koc: 427 - 1278</p> |
| Bioaccumulation | <p>Fipronil: Bioconcentration factor (BCF) 321 Does not bioaccumulate.</p> |
| Mobility in soil | <p>Fipronil: Slightly mobile in soils</p> |
| Environmental precautions | <p>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.</p> |

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.

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.

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If burned, stay out of smoke.
Consult state and local regulations regarding the proper disposal of container.

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. (FIPRONIL MIXTURE)

IATA

UN number **3077**
Class 9
Packaging group III
Environm. Hazardous Mark YES
Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (FIPRONIL 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. 432-1217

US Federal Regulations

TSCA list

Methyl oleate 112-62-9

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

Not applicable.

SARA Title III - Section 302 - Notification and Information

None.

SARA Title III - Section 313 - Toxic Chemical Release Reporting

None.

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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

| | | |
|---------------|----------|----|
| Methyl oleate | 112-62-9 | RI |
|---------------|----------|----|

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:

Signal word: Caution!

Hazard statements: Harmful if absorbed through skin.
Causes eye irritation.
Avoid contact with skin, eyes and clothing.
Wash thoroughly with soap and water after handling.

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 - 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 12. Ecological information. Section 14: Transport Information. Reviewed and updated for general editorial purposes.

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