

SAFETY DATA SHEET



DRIONE® INSECTICIDE

Version 4.0 / USA
102000002537

1/12
Revision Date: 10/13/2022
Print Date: 10/14/2022

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

Product identifier

| | |
|----------------------|---------------------|
| Trade name | DRIONE® INSECTICIDE |
| Product code (UVP) | 05938473 |
| SDS Number | 102000002537 |
| EPA Registration No. | 432-992 |

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 A division of Bayer CropScience LP 5000 Centregreen Way, Suite 400 Cary, NC 27513 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

This material is not hazardous under the criteria of the Federal OSHA Hazard Communication Standard 29CFR 1910.1200.

Hazards Not Otherwise Classified (HNOC)

No physical hazards not otherwise classified.
No health hazards not otherwise classified.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

SAFETY DATA SHEET



DRIONE® INSECTICIDE

Version 4.0 / USA
102000002537

2/12
Revision Date: 10/13/2022
Print Date: 10/14/2022

| Hazardous Component Name | CAS-No. | Concentration % by weight |
|----------------------------|-----------|---------------------------|
| Silica, amorphe | 7631-86-9 | 40.0 |
| Piperonyl butoxide | 51-03-6 | 10.0 |
| Pyrethrins and Pyrethroids | 8003-34-7 | 1.0 |

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 | Wash off immediately with plenty of water for at least 15 minutes. Take off contaminated clothing and shoes immediately. 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 | Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea., Ingestion of larger amounts may cause defects to the central nervous system (e.g. dizziness, headache). |
|-----------------|---|

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 |

SAFETY DATA SHEET



DRIONE® INSECTICIDE

Version 4.0 / USA
102000002537

3/12
Revision Date: 10/13/2022
Print Date: 10/14/2022

| | |
|--|--|
| 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. In the event of fire and/or explosion do not breathe fumes. |
| 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. |

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

| | |
|----------------------------------|-------------------|
| 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 | Remove all sources of ignition. 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. |
|--------------------------|--|

| | |
|------------------------------------|---|
| 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

SAFETY DATA SHEET



DRIONE® INSECTICIDE

Version 4.0 / USA
102000002537

4/12
Revision Date: 10/13/2022
Print Date: 10/14/2022

| | |
|---|--|
| Advice on safe handling | Avoid dust formation. Use only in area provided with appropriate exhaust ventilation. Handle and open container in a manner as to prevent spillage. |
| Advice on protection against fire and explosion | Take measures to prevent the build up of electrostatic charge. |
| 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. 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 |
|--|-----------|---|---------|-----------|
| Silica, amorphe (Total dust.) | 7631-86-9 | 15 mg/m3 (TWA) | 01 2019 | TN OEL |
| Silica, amorphe (Respirable particles.) | 7631-86-9 | 3 mg/m3 (TWA) | 01 2021 | ACGIH |
| Silica, amorphe (Total dust.) | 7631-86-9 | 50millions of particles per cubic foot of air (TWA) | 09 2016 | Z3 |
| Silica, amorphe (Total dust.) | 7631-86-9 | 15 mg/m3 (TWA) | 09 2016 | Z3 |
| Silica, amorphe (Total dust.) | 7631-86-9 | 10 mg/m3 (TWA PEL) | 12 2017 | US CA OEL |
| Silica, amorphe (Inhalable particles.) | 7631-86-9 | 10 mg/m3 (TWA) | 01 2021 | ACGIH |
| Silica, amorphe (Respirable fraction.) | 7631-86-9 | 5 mg/m3 (TWA PEL) | 12 2017 | US CA OEL |

SAFETY DATA SHEET



DRIONE® INSECTICIDE

Version 4.0 / USA
10200002537

5/12
Revision Date: 10/13/2022
Print Date: 10/14/2022

| | | | | |
|---|-----------|---|---------|-----------|
| Silica, amorphe (Respirable fraction.) | 7631-86-9 | 5 mg/m3 (TWA) | 01 2019 | TN OEL |
| Silica, amorphe (Respirable fraction.) | 7631-86-9 | 15millions of particles per cubic foot of air (TWA) | 09 2016 | Z3 |
| Silica, amorphe (Respirable fraction.) | 7631-86-9 | 5 mg/m3 (TWA) | 09 2016 | Z3 |
| Silica, amorphe | 7631-86-9 | 6 mg/m3 (REL) | 2005 | NIOSH |
| Silica, amorphe | 7631-86-9 | 0.8 mg/m3 (TWA) | 09 2016 | Z3 |
| Silica, amorphe | 7631-86-9 | 20millions of particles per cubic foot of air (TWA) | 09 2016 | Z3 |
| Piperonyl butoxide | 51-03-6 | 50 ppm (TWA) | | OES BCS* |
| Pyrethrins and Pyrethroids | 8003-34-7 | 5 mg/m3 (TWA) | 1989 | OSHA Z1A |
| Pyrethrins and Pyrethroids | 8003-34-7 | 5 mg/m3 (TWA) | 2008 | ACGIH |
| Pyrethrins and Pyrethroids | 8003-34-7 | 5 mg/m3 (PEL) | 02 2006 | OSHA Z1 |
| Pyrethrins and Pyrethroids | 8003-34-7 | 5 mg/m3 (REL) | 2005 | NIOSH |
| Pyrethrins and Pyrethroids | 8003-34-7 | 5 mg/m3 (TWA PEL) | 09 2006 | US CA OEL |
| Pyrethrins and Pyrethroids | 8003-34-7 | 5 mg/m3 (TWA) | 06 2008 | TN OEL |
| Pyrethrins and Pyrethroids | 8003-34-7 | 5 mg/m3 (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

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.

SAFETY DATA SHEET



DRIONE® INSECTICIDE

Version 4.0 / USA
102000002537

6/12
Revision Date: 10/13/2022
Print Date: 10/14/2022

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 | powder |
| Colour | white to light yellow |
| Odour | very faint |
| Odour Threshold | No data available |
| pH | No data available |
| Melting point/range | No data available |
| Boiling Point | No data available |
| Flash point | Not applicable |
| Flammability | No data available |
| Auto-ignition temperature | No data available |
| Thermal decomposition | No data available |
| Minimum ignition energy | No data available |
| Self-accelarating decomposition temperature (SADT) | No data available |
| Upper explosion limit | Not applicable |
| Lower explosion limit | Not applicable |
| 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 | 12.2 lb/ft ³ |
| Water solubility | insoluble |
| Partition coefficient: n-octanol/water | Pyrethrin: log Pow: 4.3 - 5.9 Piperonyl butoxide: log Pow: 4.75 |

SAFETY DATA SHEET



DRIONE® INSECTICIDE

Version 4.0 / USA
102000002537

7/12
Revision Date: 10/13/2022
Print Date: 10/14/2022

| | |
|-----------------------------|--|
| Viscosity, dynamic | No data available |
| Viscosity, kinematic | No data available |
| Oxidizing properties | 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. |
| Conditions to avoid | Exposure to moisture. |
| Incompatible materials | No incompatible materials known. |
| Hazardous decomposition products | No decomposition products expected under normal conditions of use. |

SECTION 11: TOXICOLOGICAL INFORMATION

| | |
|---|---|
| Exposure routes | Eye contact, Skin Absorption, Ingestion, Inhalation |
| Immediate Effects | |
| Eye | May cause temporary eye irritation. |
| Skin | May be harmful in contact with skin. |
| Ingestion | Not expected to produce significant adverse effects when recommended use instructions are followed. |
| Inhalation | Not expected to produce significant adverse effects when recommended use instructions are followed. |
| Information on toxicological effects | |
| Acute oral toxicity | LD50 (Rat) > 5,000 mg/kg |
| Acute inhalation toxicity | LC50 (Rat) > 5.4 mg/l Exposure time: 4 h Determined in the form of dust. |
| Acute dermal toxicity | LD50 (Rabbit) > 2,000 mg/kg |
| Skin corrosion/irritation | slight irritation (Rabbit) |

SAFETY DATA SHEET



DRIONE® INSECTICIDE

Version 4.0 / USA
102000002537

8/12
Revision Date: 10/13/2022
Print Date: 10/14/2022

| | |
|--|--|
| Serious eye damage/eye irritation | Mild eye irritation. (Rabbit) |
| Respiratory or skin sensitisation | Skin: Non-sensitizing. (Guinea pig) OECD Test Guideline 406, Buehler test |
| Repeated dose toxicity | Chronic toxicity |

Assessment STOT Specific target organ toxicity – single exposure

Pyrethrin: Based on available data, the classification criteria are not met.
Piperonyl butoxide: Based on available data, the classification criteria are not met.

Assessment STOT Specific target organ toxicity – repeated exposure

Pyrethrin: Based on available data, the classification criteria are not met.
Piperonyl butoxide did not cause specific target organ toxicity in experimental animal studies.

Assessment mutagenicity

Pyrethrin was not mutagenic or genotoxic in a battery of in vitro and in vivo tests.
Piperonyl butoxide was not mutagenic or genotoxic in a battery of in vitro and in vivo tests.

Assessment carcinogenicity

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

ACGIH

| | | |
|----------------------------|-----------|----------|
| Pyrethrins and Pyrethroids | 8003-34-7 | Group A4 |
|----------------------------|-----------|----------|

NTP

None.

IARC

| | | |
|--------------------|-----------|-----------------------|
| Silica, amorphe | 7631-86-9 | Overall evaluation: 3 |
| Piperonyl butoxide | 51-03-6 | Overall evaluation: 3 |

Assessment toxicity to reproduction

Pyrethrin: Based on available data, the classification criteria are not met.
Piperonyl butoxide did not cause reproductive toxicity in a two-generation study in rats.

Assessment developmental toxicity

Pyrethrin did not cause developmental toxicity in rats and rabbits.
Piperonyl butoxide did not cause developmental toxicity in rats and rabbits.

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).

SAFETY DATA SHEET



DRIONE® INSECTICIDE

Version 4.0 / USA
102000002537

9/12
Revision Date: 10/13/2022
Print Date: 10/14/2022

SECTION 12: ECOLOGICAL INFORMATION

| | |
|---|---|
| Biodegradability | Pyrethrin: Not rapidly biodegradable Piperonyl butoxide: Not rapidly biodegradable |
| Koc | Pyrethrin: Koc: 12472 - 74175 Piperonyl butoxide: Koc: 399 - 830 |
| Bioaccumulation | Pyrethrin: Bioconcentration factor (BCF) 471 Does not bioaccumulate. Piperonyl butoxide: Potential bioaccumulation |
| Mobility in soil | Pyrethrin: Immobile in soil Piperonyl butoxide: Moderately mobile in soils |
| Results of PBT and vPvB assessment | |
| PBT and vPvB assessment | Pyrethrin: 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). Piperonyl butoxide: 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 allow to get into surface water, drains and ground water. Do not apply when weather conditions favor runoff or drift. 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. Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area. 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. |
| Contaminated packaging | Consult state and local regulations regarding the proper disposal of container. Follow advice on product label and/or leaflet. |

SAFETY DATA SHEET



DRIONE® INSECTICIDE

Version 4.0 / USA
102000002537

10/12
Revision Date: 10/13/2022
Print Date: 10/14/2022

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

| | |
|----------------------|--|
| UN number | 3077 |
| Class | 9 |
| Packaging group | III |
| Marine pollutant | Marine pollutant |
| Proper shipping name | ENVIRONMENTALLY HAZARDOUS SUBSTANCES, SOLID, N.O.S. (PYRETHRINS) |
| RQ | Reportable Quantity is reached with 100 lb of product. |

IMDG

| | |
|----------------------|---|
| UN number | 3077 |
| Class | 9 |
| Packaging group | III |
| Marine pollutant | YES |
| Proper shipping name | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (PYRETHRINS MIXTURE) |

IATA

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

Freight Classification: INSECTICIDES OR FUNGICIDES, N.O.I., OTHER THAN POISON

SECTION 15: REGULATORY INFORMATION

EPA Registration No. 432-992

SAFETY DATA SHEET



DRIONE® INSECTICIDE

Version 4.0 / USA
102000002537

11/12
Revision Date: 10/13/2022
Print Date: 10/14/2022

US Federal Regulations

TSCA list

Silica, amorphe 7631-86-9
Piperonyl butoxide 51-03-6

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

Yes

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

| | | |
|----------------------------|-----------|------------------------|
| Silica, amorphe | 7631-86-9 | CA, CT, MN, RI |
| Piperonyl butoxide | 51-03-6 | CT, NJ |
| Pyrethrins and Pyrethroids | 8003-34-7 | CA, CT, IL, MN, NJ, RI |

Environmental

CERCLA

Yes

Pyrethrins and Pyrethroids 8003-34-7

Listed

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 absorbed through skin.
Causes moderate eye irritation.

SECTION 16: OTHER INFORMATION

Abbreviations and acronyms

SAFETY DATA SHEET



DRIONE® INSECTICIDE

Version 4.0 / USA
102000002537

12/12
Revision Date: 10/13/2022
Print Date: 10/14/2022

| | |
|---------|---|
| 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 - 2 Instability - 0 Others - none

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

Health - 1 Flammability - 2 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 3: Composition / Information on Ingredients. Section 8: Exposure Controls / Personal Protection. Section 11: Toxicological Information. Section 15: Regulatory information. Reviewed and updated for general editorial purposes.

Revision Date: 10/13/2022

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

This information is provided in good faith but without express or implied warranty. The customer assumes all responsibility for safety and use not in accordance with label instructions. The product names are registered trademarks of Bayer.