



CHIPCO® 26019 FLO BRAND FUNGICIDE

Version 4 / USA
102000012056

1/12
Revision Date: 09/23/2013
Print Date: 10/01/2013

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

Product identifier

| | |
|----------------------|-----------------------------------|
| Trade name | CHIPCO® 26019 FLO BRAND FUNGICIDE |
| Product code (UVP) | 05931509 |
| SDS Number | 102000012056 |
| EPA Registration No. | 432-888 |

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

| | |
|---------------------|-------------------------------------|
| Use | Fungicide |
| Restrictions on use | See product label for restrictions. |

Information on manufacturer

Bayer Environmental Science
2 T.W. Alexander Drive
Research Triangle PK, NC 27709
United States

Emergency telephone no.

All Emergencies, 24hr/ 7 days 1-800-334-7577 (24 hours/day)

| | |
|-----------------------------------|----------------|
| Product Information Telephone No. | 1-800-331-2867 |
|-----------------------------------|----------------|

SDS Information or Request SDSINFO.BCS-NA@bayer.com

SECTION 2: HAZARDS IDENTIFICATION

Classification in accordance with regulation HCS 29CFR §1910.1200

Aspiration hazard : Category 1

Skin irritation : Category 2

Specific target organ toxicity - repeated exposure : Category 2



Signal word: Danger

Hazard statements

May be fatal if swallowed and enters airways.

Causes skin irritation.

May cause damage to organs (adrenal gland) through prolonged or repeated exposure.

Precautionary statements

Wash thoroughly after handling.

Wear protective gloves.

Do not breathe spray.

IF ON SKIN: Wash with plenty of soap and water.



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If skin irritation occurs: Get medical advice/attention.
Take off contaminated clothing and wash before reuse.
Get medical advice/attention if you feel unwell.
IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
Do NOT induce vomiting.
Store locked up.
Dispose of contents/container in accordance with local regulation.

Other hazards

No other hazards known.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

| Hazardous Component Name | CAS-No. | Average % by Weight |
|--|------------|---------------------|
| Iprodione | 36734-19-7 | 23.30 |
| Distillates (petroleum), solvent-refined light paraffinic | 64741-89-5 | 32.30 |
| 1,2-Propanediol | 57-55-6 | 4.90 |
| Nonylphenol ethoxylate, branched | 68412-54-4 | 2.90 |
| Naphthalene and alkyl naphthalene sulphonic acids formaldehyde condensate, sodium salt | 68425-94-5 | 2.00 |

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.



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Indication of any immediate medical attention and special treatment needed

| | |
|------------------|---|
| Risks | Contains hydrocarbon solvents. May pose an aspiration pneumonia hazard. |
| Treatment | Appropriate supportive and symptomatic treatment as indicated by the patient's condition is recommended. There is no specific antidote. |

SECTION 5: FIREFIGHTING MEASURES

Extinguishing media

| | |
|-------------------|--|
| Suitable | Dry chemical, Carbon dioxide (CO ₂), Foam, Water spray |
| Unsuitable | None known. |

| | |
|--|---|
| 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 fire-fighters | 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 | No flash point - Determination conducted up to the boiling point. |
|--------------------|---|

| | |
|---------------------------------|-------------------|
| Autoignition temperature | no data available |
|---------------------------------|-------------------|

| | |
|------------------------------|----------|
| Lower explosion limit | 2.6 %(V) |
|------------------------------|----------|

| | |
|------------------------------|---------|
| Upper explosion limit | 12 %(V) |
|------------------------------|---------|

| | |
|--------------------|-------------------|
| Explosivity | no data available |
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| | |
|-----------------------------|-----------------|
| Dust explosion class | Not applicable. |
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SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Precautions Avoid contact with spilled product or contaminated surfaces. Isolate hazard area. Keep unauthorized people away.

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. Contaminated soil may have to be removed and disposed.

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

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling

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

Advice on protection against fire and explosion 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. 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 |
|------------|------------|------------------------------|--------|----------|
| Iprodione | 36734-19-7 | 2 mg/m ³ (TWA) | | OES BCS* |



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| | | | | |
|---|------------|------------------------|---------|-----------|
| Iprodione | 36734-19-7 | 5 ug/m3 (AN ESL) | 07 2011 | TX ESL |
| Iprodione | 36734-19-7 | 50 ug/m3 (ST ESL) | 07 2011 | TX ESL |
| Distillates (petroleum), solvent-refined light paraffinic (Mist.) | 64741-89-5 | 5 mg/m3 (TWA) | 01 2006 | ACGIH |
| Distillates (petroleum), solvent-refined light paraffinic (Mist.) | 64741-89-5 | 10 mg/m3 (STEL) | 01 2006 | ACGIH |
| Distillates (petroleum), solvent-refined light paraffinic (Inhalable fraction.) | 64741-89-5 | 0.2 mg/m3 (TWA) | 01 2006 | ACGIH NIC |
| Distillates (petroleum), solvent-refined light paraffinic | 64741-89-5 | 50 ug/m3 (ST ESL) | 10 2003 | TX ESL |
| Distillates (petroleum), solvent-refined light paraffinic | 64741-89-5 | 5 ug/m3 (AN ESL) | 10 2003 | TX ESL |
| 1,2-Propanediol (Aerosol.) | 57-55-6 | 10 mg/m3 (TWA) | 2010 | WEEL |
| 1,2-Propanediol | 57-55-6 | 1000 ug/m3 (ST ESL) | 03 2012 | TX ESL |
| 1,2-Propanediol | 57-55-6 | 50 ug/m3 (ST ESL) | 03 2012 | TX ESL |
| 1,2-Propanediol | 57-55-6 | 100 ug/m3 (AN ESL) | 03 2012 | TX ESL |
| 1,2-Propanediol | 57-55-6 | 50 ppb (AN ESL) | 03 2012 | TX ESL |
| 1,2-Propanediol | 57-55-6 | 500 ppb (ST ESL) | 03 2012 | TX ESL |
| 1,2-Propanediol | 57-55-6 | 5 ug/m3 (AN ESL) | 03 2012 | TX ESL |

*OES BCS: Internal Bayer CropScience "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.



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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

| | |
|---|---|
| Appearance | white to light beige |
| Physical State | liquid suspension |
| Odor | aromatic |
| Odour Threshold | no data available |
| pH | 4.0 - 7.5 (100 %) |
| Vapor Pressure | no data available |
| Vapor Density (Air = 1) | no data available |
| Density | 1.03 g/cm ³ at 20 °C |
| Evaporation rate | no data available |
| Boiling Point | 100 °C / 212 °F |
| Melting / Freezing Point | no data available |
| Water solubility | dispersible |
| Minimum Ignition Energy | not applicable |
| Decomposition temperature | no data available |
| Partition coefficient: n-octanol/water | no data available |
| Viscosity | 1,000 - 1,500 cps |
| Flash point | No flash point - Determination conducted up to the boiling point. |
| Autoignition temperature | no data available |
| Lower explosion limit | 2.6 %(V) |
| Upper explosion limit | 12 %(V) |



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|-----------------------------|-------------------|
| Explosivity | no data available |
| Dust explosion class | Not applicable. |

SECTION 10: STABILITY AND REACTIVITY

Reactivity

Thermal decomposition no data available

Chemical stability Stable under normal conditions.

Possibility of hazardous reactions No hazardous reactions known.

Conditions to avoid Heat, flames and sparks.
Static electricity.

Incompatible materials Strong bases, Strong acids, Strong oxidizing agents

Hazardous decomposition products Nitrogen oxides (NO_x)
Sulphur oxides
Hydrogen chloride (HCl)

SECTION 11: TOXICOLOGICAL INFORMATION

Exposure routes Eye contact, Inhalation, Skin contact, Ingestion

Immediate Effects

Eye Causes eye irritation.

Skin Harmful if absorbed through skin. Causes skin irritation.

Ingestion Harmful if swallowed.

Inhalation Harmful if inhaled. May cause upper respiratory tract irritation.

Information on toxicological effects

Acute oral toxicity LD50 (male rat) > 5,000 mg/kg

LD50 (female rat) 4,619 mg/kg



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Acute inhalation toxicity LC50 (male/female combined rat) > 0.8 mg/l
Exposure time: 4 h
Determined in the form of liquid aerosol.
Highest attainable concentration.
No deaths

LC50 (male/female combined rat) > 3.2 mg/l
Exposure time: 1 h
Determined in the form of liquid aerosol.
Extrapolated from the 4 hr LC50.

Acute dermal toxicity LD50 (male/female combined rat) > 2,000 mg/kg

Skin irritation Slight irritation (rabbit)

Eye irritation Minimally irritating. (rabbit)

Sensitisation Non-sensitizing. (guinea pig)

Assessment repeated dose toxicity

Iprodione caused specific target organ toxicity in experimental animal studies in rats in the following organ(s): adrenal gland.

Assessment Mutagenicity

Iprodione was not mutagenic or genotoxic based on the overall weight of evidence in a battery of in vitro and in vivo tests.

Assessment Carcinogenicity

Iprodione caused at high dose levels an increased incidence of tumours in the following organ(s): liver, testes. The mechanism that triggers tumours in rodents and the type of tumours observed are not relevant to humans.

ACGIH

None.

NTP

Distillates (petroleum), solvent-refined
light paraffinic 64741-89-5

IARC

Distillates (petroleum), solvent-refined
light paraffinic 64741-89-5 Overall evaluation: 1

OSHA

None.

Assessment toxicity to reproduction

Iprodione did not cause reproductive toxicity in a two-generation study in rats.

Assessment developmental toxicity

Iprodione caused developmental toxicity only at dose levels toxic to the dams. The



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developmental effects seen with Iprodione are related to maternal toxicity.

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 (Rainbow trout (<i>Oncorhynchus mykiss</i>)) 4.1 mg/l Exposure time: 96 h The value mentioned relates to the active ingredient iprodione. |
| Toxicity to aquatic invertebrates | (Water flea (<i>Daphnia magna</i>)) 0.25 mg/l Exposure time: 48 h The value mentioned relates to the active ingredient iprodione. |
| Toxicity to aquatic plants | IC50 (<i>Scenedesmus subspicatus</i>) 15.3 mg/l Exposure time: 72 h The value mentioned relates to the active ingredient iprodione. |
| Biodegradability | Iprodione: not rapidly biodegradable |
| Koc | Iprodione: Koc:202 - 543 |
| Bioaccumulation | Iprodione: Bioconcentration factor (BCF) 70 Does not bioaccumulate. |
| Mobility in soil | Iprodione: Moderately mobile in soils |
| 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. Do not allow to get into surface water, drains and ground water. Drift and runoff from treated areas may be hazardous to aquatic organisms in adjacent sites. Apply this product as specified on the label. |

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods

Product Do not contaminate water, food, or feed by disposal.
Dispose in accordance with all local, state/provincial and federal regulations.
Follow advice on product label and/or leaflet.

Contaminated packaging Do not re-use empty containers.
Triple rinse containers.



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Puncture container to avoid re-use.
Dispose of empty container in a sanitary landfill or by incineration,
or, if allowed by State/Provincial and local authorities, by burning.
If burned, stay out of smoke.
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 **3082**
Class **9**
Packaging group **III**
Marine pollutant **YES**
Proper shipping name **ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (IPRODIONE SOLUTION)**

IATA

UN number **3082**
Class **9**
Packaging group **III**
Environm. Hazardous Mark **YES**
Proper shipping name **ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (IPRODIONE 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.

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

SECTION 15: REGULATORY INFORMATION

EPA Registration No. 432-888



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US Federal Regulations

TSCA list

| | |
|--|------------|
| Distillates (petroleum), solvent-refined light paraffinic | 64741-89-5 |
| 1,2-Propanediol | 57-55-6 |
| Nonylphenol ethoxylate, branched | 68412-54-4 |
| Naphthalene and alkyl naphthalene sulphonic acids formaldehyde condensate, sodium salt | 68425-94-5 |

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

None.

SARA Title III - Section 302 - Notification and Information

None.

SARA Title III - Section 313 - Toxic Chemical Release Reporting

None.

US States Regulatory Reporting

CA Prop65

This product contains a chemical known to the State of California to cause cancer.
Iprodione 36734-19-7

This product does not contain any substances known to the State of California to cause reproductive harm.

US State Right-To-Know Ingredients

| | | |
|---|------------|--------|
| Distillates (petroleum), solvent-refined light paraffinic | 64741-89-5 | CA, MA |
| 1,2-Propanediol | 57-55-6 | MN, RI |

Canadian Regulations

Canadian Domestic Substance List

| | |
|--|------------|
| Distillates (petroleum), solvent-refined light paraffinic | 64741-89-5 |
| 1,2-Propanediol | 57-55-6 |
| Nonylphenol ethoxylate, branched | 68412-54-4 |
| Naphthalene and alkyl naphthalene sulphonic acids formaldehyde condensate, sodium salt | 68425-94-5 |

Environmental

CERCLA

None.

Clean Water Section 307 Priority Pollutants

None.

Safe Drinking Water Act Maximum Contaminant Levels

None.

International Regulations

European Inventory of Existing Commercial Substances (EINECS)

| | |
|---|------------|
| Iprodione | 36734-19-7 |
| Distillates (petroleum), solvent-refined light paraffinic | 64741-89-5 |
| 1,2-Propanediol | 57-55-6 |



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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 swallowed, inhaled or absorbed through the skin.
Avoid contact with skin, eyes and clothing.
Avoid breathing spray mist.

SECTION 16: OTHER INFORMATION

NFPA 704 (National Fire Protection Association):

Health - 2 Flammability - 2 Instability - 1 Others - none

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

Health - 2 Flammability - 2 Physical Hazard - 1 PPE -

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

Reason for Revision: Revised according to the current OSHA Hazard Communication Standard (29CFR1910.1200)

Revision Date: 09/23/2013

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.