



CHIPCO® 26019 FLO BRAND FUNGICIDE

Version 4 / USA
102000012056

1/12
Revision Date: 09/23/2013
Print Date: 05/06/2015

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 (CO₂), 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

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
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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)

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