Benevia™ Insect Control



Version Revision Date: SDS Number: Date of last issue: -

1.1 05/23/2023 50000912 Date of first issue: 02/01/2018

SECTION 1. IDENTIFICATION

Product identifier

Product name Benevia™ Insect Control

Other means of identification

Product code 50000912

Recommended use of the chemical and restrictions on use

Recommended use Can be used as insecticide only.

Restrictions on useUse as recommended by the label.

Details of the supplier of the safety data sheet

<u>Manufacturer</u> FMC Corporation

2929 WALNUT ST

PHILADELPHIA PA 19104

USA

(215) 299-6000 SDS-Info@fmc.com

Emergency telephone

For leak, fire, spill or accident emergencies, call:

1 800 / 424-9300 (CHEMTREC - U.S.A.) 1 703 / 741-5970 (CHEMTREC - International) 1 703 / 527-3887 (CHEMTREC - Alternate)

Medical emergency:

U.S.A. & Canada: +1 800 / 331-3148

All other countries: +1 651 / 632-6793 (Collect)

SECTION 2. HAZARDS IDENTIFICATION

GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin sensitization : Category 1

Specific target organ toxicity

- repeated exposure

Category 2 (Respiratory system)

GHS label elements

Hazard pictograms



Signal Word : Warning

Benevia™ Insect Control



Version Revision Date: SDS Number: Date of last issue: -

1.1 05/23/2023 50000912 Date of first issue: 02/01/2018

Hazard Statements : H317 May cause an allergic skin reaction.

H373 May cause damage to organs through prolonged or re-

peated exposure.

Precautionary Statements : Prevention:

P260 Do not breathe dust, fume, gas, mist, vapors or spray. P272 Contaminated work clothing should not be allowed out of

the workplace.

P280 Wear protective gloves.

Response:

P302 + P352 IF ON SKIN: Wash with plenty of water and soap.

P314 Get medical advice/ attention if you feel unwell.

P333 + P313 If skin irritation or rash occurs: Get medical advice/

attention.

P363 Wash contaminated clothing before reuse.

Disposal:

P501 Dispose of contents/ container to an approved waste dis-

posal plant.

Other hazards

Very toxic to aquatic life with long lasting effects.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Components

Chemical name	CAS-No.	Concentration (% w/w)
Cyantraniliprole	736994-63-1	10.26
calcium dodecylbenzenesulphonate	26264-06-2	>= 10 - < 20
2-ethylhexan-1-ol	104-76-7	>= 5 - < 10
Aerosil	112945-52-5	>= 1 - < 5

SECTION 4. FIRST AID MEASURES

General advice : Move out of dangerous area.

Show this safety data sheet to the doctor in attendance.

Do not leave the victim unattended.

If inhaled : If unconscious, place in recovery position and seek medical

advice

If symptoms persist, call a physician.

In case of skin contact : If on skin, rinse well with water.

In case of eye contact : Flush eyes with water as a precaution.

Remove contact lenses. Protect unharmed eye.

Keep eye wide open while rinsing.

If eye irritation persists, consult a specialist.

Benevia™ Insect Control



Version Revision Date: SDS Number: Date of last issue: -

1.1 05/23/2023 50000912 Date of first issue: 02/01/2018

If swallowed : DO NOT induce vomiting unless directed to do so by a physi-

cian or poison control center. Keep respiratory tract clear.

Do not give milk or alcoholic beverages.

Never give anything by mouth to an unconscious person.

If symptoms persist, call a physician.

Most important symptoms and effects, both acute and

delayed

Exposure to skin may result in mild symptoms include itching, hives or rash, and skin redness. More severe symptoms include sneezing, itchy watery eyes, and difficulty breathing.

May cause an allergic skin reaction.

May cause damage to organs through prolonged or repeated

exposure if inhaled.

Protection of first-aiders : Avoid inhalation, ingestion and contact with skin and eyes.

Notes to physician : Treat symptomatically.

SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media : Dry chemical, CO2, water spray or regular foam.

Unsuitable extinguishing

media

Do not spread spilled material with high-pressure water

streams.

Specific hazards during fire

fighting

Do not allow run-off from fire fighting to enter drains or water

courses.

Hazardous combustion prod-

ucts

Fire may produce irritating, corrosive and/or toxic gases.

Carbon oxides Sulfur oxides

Chlorine compounds Nitrogen oxides (NOx) brominated compounds Chlorinated compounds

Hydrogen chloride Hydrogen cyanide

Specific extinguishing meth-

ods

Remove undamaged containers from fire area if it is safe to do

SO.

Use a water spray to cool fully closed containers.

Further information : Use extinguishing measures that are appropriate to local cir-

cumstances and the surrounding environment.

Collect contaminated fire extinguishing water separately. This

must not be discharged into drains.

Fire residues and contaminated fire extinguishing water must

be disposed of in accordance with local regulations.

Special protective equipment:

for fire-fighters

Firefighters should wear protective clothing and self-contained

breathing apparatus.

Benevia™ Insect Control



Version Revision Date: SDS Number: Date of last issue: -

1.1 05/23/2023 50000912 Date of first issue: 02/01/2018

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emer-

gency procedures

Use personal protective equipment. If it can be safely done, stop the leak.

Keep people away from and upwind of spill/leak. Do not touch or walk through the spilled material.

Remove all sources of ignition.

Immediately evacuate personnel to safe areas.

Ensure adequate ventilation.

Never return spills in original containers for re-use.

Mark the contaminated area with signs and prevent access to

unauthorized personnel.

Only qualified personnel equipped with suitable protective

equipment may intervene.

For disposal considerations see section 13.

Environmental precautions : Prevent product from entering drains.

Prevent further leakage or spillage if safe to do so.

If the product contaminates rivers and lakes or drains inform

respective authorities.

Methods and materials for containment and cleaning up

Never return spills in original containers for re-use.

Collect as much of the spill as possible with a suitable absor-

bent material.

Pick up and transfer to properly labeled containers. Keep in suitable, closed containers for disposal.

SECTION 7. HANDLING AND STORAGE

Advice on protection against :

fire and explosion

Normal measures for preventive fire protection.

Advice on safe handling : Do not breathe vapors/dust.

Avoid exposure - obtain special instructions before use.

Avoid contact with skin and eyes. For personal protection see section 8.

Smoking, eating and drinking should be prohibited in the ap-

plication area.

Dispose of rinse water in accordance with local and national

regulations.

Persons susceptible to skin sensitization problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being

used.

Conditions for safe storage

Keep container tightly closed in a dry and well-ventilated

place.

Containers which are opened must be carefully resealed and

kept upright to prevent leakage.

Electrical installations / working materials must comply with

the technological safety standards.

Keep container tightly closed in a dry and well-ventilated

place.

Benevia™ Insect Control



Version Revision Date: SDS Number: Date of last issue: -

1.1 05/23/2023 50000912 Date of first issue: 02/01/2018

Containers which are opened must be carefully resealed and

kept upright to prevent leakage.

Electrical installations / working materials must comply with

the technological safety standards.

Further information on stor-

age conditions

The product is stable under normal conditions of warehouse

storage.

Protect from frost and extreme heat.

Store in closed, labelled containers. The storage room should be constructed of incombustible material, closed, dry, ventilated and with impermeable floor, without access of unauthorised persons or children. The room should only be used for storage of chemicals. Food, drink, feed and seed should not

be present. A hand wash station should be available.

Recommended storage tem: :

perature

> 32 - 95 °F / > 0 - 35 °C

Further information on stor-

age stability

No decomposition if stored and applied as directed.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
2-ethylhexan-1-ol	104-76-7	TWA	5 ppm	ACGIH
Aerosil 112945-52-5	TWA (Dust)	20 Million parti- cles per cubic foot (Silica)	OSHA Z-3	
		TWA (Dust)	80 mg/m3 / %SiO2 (Silica)	OSHA Z-3
		TWA	6 mg/m3 (Silica)	NIOSH REL

Personal protective equipment

Respiratory protection : In the case of dust or aerosol formation use respirator with an

approved filter.

Hand protection

Material : Wear chemical resistant gloves, such as barrier laminate,

butyl rubber or nitrile rubber.

Remarks : The suitability for a specific workplace should be discussed

with the producers of the protective gloves.

Eye protection : Eye wash bottle with pure water

Tightly fitting safety goggles

Skin and body protection : Impervious clothing

Benevia™ Insect Control



Version Revision Date: SDS Number: Date of last issue: -

1.1 05/23/2023 50000912 Date of first issue: 02/01/2018

Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Protective measures : Plan first aid action before beginning work with this product.

Always have on hand a first-aid kit, together with proper in-

structions.

Wear suitable protective equipment. When using do not eat, drink or smoke.

In the context of professional plant protection use as recommended, the end user must refer to the label and the instruc-

tions for use.

Hygiene measures : Avoid contact with skin, eyes and clothing.

Do not inhale aerosol.

When using do not eat or drink. When using do not smoke.

Wash hands before breaks and at the end of workday.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : dispersion

Color : off-white

Odor : mild, oily

Odor Threshold : No data available

pH : 5.1

Concentration: 10 g/l (as a dispersion)

Melting point/freezing point : not determined

Boiling point/boiling range : 210 °F / 99 °C

Flash point : $> 210 \, ^{\circ}\text{F} / > 99 \, ^{\circ}\text{C}$

Method: closed cup

Evaporation rate : No data available

Flammability (liquids) : Not highly flammable

Self-ignition : 489 °F / 254 °C

Upper explosion limit / Upper

flammability limit

not determined

Benevia™ Insect Control



Version **Revision Date:** SDS Number: Date of last issue: -

05/23/2023 50000912 Date of first issue: 02/01/2018 1.1

Lower explosion limit / Lower : not determined

flammability limit

Relative vapor density Not available for this mixture.

Relative density 0.978

Density No data available

Bulk density 0.9 - 1.1 g/cm3

Solubility(ies)

Water solubility dispersible

Partition coefficient: n-

octanol/water

No data available

No data available Autoignition temperature

Decomposition temperature not determined

Viscosity

Viscosity, dynamic 345 mPa.s

25 rpm

257 mPa.s 50 rpm

200 mPa.s 100 rpm

Viscosity, kinematic 353 mm2/s

25 rpm

204 mm2/s 100 rpm

Explosive properties Not explosive

Oxidizing properties Non-oxidizing

Molecular weight Not applicable

SECTION 10. STABILITY AND REACTIVITY

Reactivity No decomposition if stored and applied as directed.

Chemical stability No decomposition if stored and applied as directed.

tions

Possibility of hazardous reac- : No decomposition if stored and applied as directed.

Benevia™ Insect Control



Version Revision Date: SDS Number: Date of last issue: -

1.1 05/23/2023 50000912 Date of first issue: 02/01/2018

Conditions to avoid : Avoid formation of aerosol.

Avoid extreme temperatures. Heat, flames and sparks.

Protect from frost, heat and sunlight.

Incompatible materials : Avoid strong acids, bases, and oxidizers.

Hazardous decomposition

products

: Stable under recommended storage conditions.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

Not classified based on available information.

Product:

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg

Method: OECD Test Guideline 425

GLP: yes

Assessment: The substance or mixture has no acute oral tox-

icity

Acute inhalation toxicity : LC50 (Rat): > 5.2 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Method: OECD Test Guideline 403

GLP: ves

Assessment: The component/mixture is minimally toxic after

short term inhalation.

Acute dermal toxicity : LD50 (Rat): > 5,000 mg/kg

Method: OECD Test Guideline 402

GLP: yes

Assessment: The substance or mixture has no acute dermal

toxicity

Skin corrosion/irritation

Not classified based on available information.

Product:

Species : Rabbit

Assessment : Not classified as irritant
Method : OECD Test Guideline 404
Result : slight or no skin irritation.

GLP : yes

Remarks : May cause skin irritation and/or dermatitis.

Serious eye damage/eye irritation

Not classified based on available information.

Benevia™ Insect Control



Version Revision Date: SDS Number: Date of last issue: -

1.1 05/23/2023 50000912 Date of first issue: 02/01/2018

Product:

Species : Rabbit

Result : Slight or no eye irritation
Assessment : Not classified as irritant
Method : OECD Test Guideline 405

GLP : yes

Respiratory or skin sensitization

Skin sensitization

May cause an allergic skin reaction.

Respiratory sensitization

Not classified based on available information.

Product:

Species : multiple species

Method : OECD Test Guideline 406

Result : May cause sensitization by skin contact.

Test Type : Local lymph node test

Species : mice

Assessment : May cause sensitization by skin contact.

Method : OECD Test Guideline 429
Result : Causes sensitization.

GLP : yes

Remarks : Causes sensitization.

Germ cell mutagenicity

Not classified based on available information.

Product:

Genotoxicity in vitro : Test Type: Ames test

Method: OECD Test Guideline 471

Result: negative

Genotoxicity in vivo : Test Type: Bone marrow chromosome aberration.

Species: Mouse

Method: OECD Test Guideline 474

Result: negative

Germ cell mutagenicity -

Assessment

: Contains no ingredient listed as a mutagen

Carcinogenicity

Not classified based on available information.

Product:

Carcinogenicity - Assess-

ment

: Contains no ingredient listed as a carcinogen

Benevia™ Insect Control



Version Revision Date: SDS Number: Date of last issue: -

1.1 05/23/2023 50000912 Date of first issue: 02/01/2018

IARC No ingredient of this product present at levels greater than or equal to 0.1% is

identified as probable, possible or confirmed human carcinogen by IARC.

OSHANo component of this product present at levels greater than or equal to 0.1% is

on OSHA's list of regulated carcinogens.

NTP No ingredient of this product present at levels greater than or equal to 0.1% is

identified as a known or anticipated carcinogen by NTP.

Reproductive toxicity

Not classified based on available information.

Product:

Reproductive toxicity - As-

sessment

: Contains no ingredient listed as toxic to reproduction

STOT-single exposure

Not classified based on available information.

Product:

Assessment : The substance or mixture is not classified as specific target

organ toxicant, single exposure.

STOT-repeated exposure

May cause damage to organs through prolonged or repeated exposure.

Product:

Assessment : The substance or mixture is not classified as specific target

organ toxicant, repeated exposure.

Repeated dose toxicity

Components:

Cyantraniliprole:

Species : Rat

NOAEL : > 1,000 mg/kg

Application Route : Oral Exposure time : 28 d

Method : OECD Test Guideline 407 Symptoms : increased liver weight

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

calcium dodecylbenzenesulphonate:

Species : Rat, male and female

NOAEL : 85 mg/kg LOAEL : 145 mg/kg Application Route : Oral





Version Revision Date: SDS Number: Date of last issue: -

1.1 05/23/2023 50000912 Date of first issue: 02/01/2018

Exposure time : 9 Months

Remarks : Based on data from similar materials

Species : Rat, male and female

: 1 mg/kg, 1 mg/l, 1 mg/kg bw/day

NOAEL : 100 mg/kg, 10 mg/l, 10 ppm

LOAEL : 200 mg/kg, 10 mg/l, 10 mg/kg bw/day

Application Route : Oral

Exposure time : 10 unit manually typed 14 h
Number of exposures : 5 unit manually typed
Subsequent observation : 10 unit manually typed

period

Method : OECD Test Guideline 422

Remarks : Based on data from similar materials

Species : Rat, male
LOAEL : 286 mg/kg
Application Route : Skin contact
Exposure time : 15 Days

Remarks : Based on data from similar materials

2-ethylhexan-1-ol:

Species : Rat

: 250 mg/kg

Application Route : Oral Exposure time : 13 weeks

Method : OECD Test Guideline 408

Aerosil:

Remarks : No adverse effect has been observed in chronic toxicity tests.

Aspiration toxicity

Not classified based on available information.

Product:

No aspiration toxicity classification

Further information

Product:

Remarks : Information presented in this Section conforms to the require-

ments of the Occupational Safety and Health Administration (OSHA) Hazard Communication Standard of 2012. See Section 15 for applicable information conforming to the requirements of the Federal Insecticide Fungicide and Rodenticide Act (FIFRA), as required by the US Environmental Protection

Agency (EPA), or by state Regulatory Agencies.

Remarks : No data available

Benevia™ Insect Control



Version Revision Date: SDS Number: Date of last issue: -

1.1 05/23/2023 50000912 Date of first issue: 02/01/2018

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Product:

Toxicity to fish : LC50 (Lepomis macrochirus (Bluegill sunfish)): 37 mg/l

Exposure time: 96 h Test Type: static test

Method: OECD Test Guideline 203

GLP: yes

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 0.215 mg/l

Exposure time: 48 h

Method: OECD Test Guideline 202

GLP: yes

EC50 (Daphnia magna (Water flea)): 0.00947 mg/l

Exposure time: 48 h

Method: OECD Test Guideline 202

GLP: yes

EC50 (Daphnia magna (Water flea)): 20.4 µg/l

Exposure time: 48 h

Method: OECD Test Guideline 202

GLP: ves

Toxicity to algae/aquatic

plants

ErC50 (Pseudokirchneriella subcapitata (green algae)): 63.8

mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

GLP: yes

Toxicity to soil dwelling or-

ganisms

LC50 (worms): > 1,000 mg/kg

Toxicity to terrestrial organ-

isms

LD50 (Apis mellifera (bees)): 3.79 µg/bee

Exposure time: 72 h

End point: Acute oral toxicity

LD50 (Apis mellifera (bees)): 6.31 µg/bee

Exposure time: 96 h

End point: Acute contact toxicity

Ecotoxicology Assessment

Acute aquatic toxicity : Very toxic to aquatic life.

Chronic aquatic toxicity : Very toxic to aquatic life with long lasting effects.

Components:

Cyantraniliprole:

Benevia™ Insect Control



Version Revision Date: SDS Number: Date of last issue: -

1.1 05/23/2023 50000912 Date of first issue: 02/01/2018

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): > 12.6 mg/l

Exposure time: 96 h

LC50 (Ictalurus punctatus (channel catfish)): > 10 mg/l

Exposure time: 96 h

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 0.0204 mg/l

Exposure time: 48 h

Toxicity to algae/aquatic

plants

: ErC50 (Pseudokirchneriella subcapitata (green algae)): > 13

mg/

Exposure time: 72 h

EbC50 (Pseudokirchneriella subcapitata (algae)): > 13 mg/l

Exposure time: 72 h

ErC50 (Lemna gibba (duckweed)): 0.278 mg/l

Exposure time: 7 d

EyC50 (Lemna gibba (duckweed)): 0.060 mg/l

Exposure time: 7 d

Toxicity to fish (Chronic tox-

icity)

NOEC (Cyprinodon variegatus (sheepshead minnow)): 2.9

mg/

Exposure time: 28 d

NOEC (Oncorhynchus mykiss (rainbow trout)): 0.11 mg/l

Exposure time: 21 d

Toxicity to daphnia and other : aquatic invertebrates (Chron-

ic toxicity)

NOEC (Daphnia magna (Water flea)): 0.00656 mg/l

Exposure time: 21 d

NOEC (Daphnia magna (Water flea)): 0.00969 mg/l

Exposure time: 21 d

NOEC (Daphnia magna (Water flea)): 0.00447 mg/l

Exposure time: 21 d

Toxicity to soil dwelling or-

ganisms

LC50 (Eisenia fetida (earthworms)): > 1,000 mg/kg

Exposure time: 14 d

Toxicity to terrestrial organ-

isms

LD50 (Apis mellifera (bees)): > 0.0934 µg/bee

Exposure time: 48 h

End point: Acute contact toxicity

LD50 (Apis mellifera (bees)): > 0.1055 µg/bee

Exposure time: 48 h

End point: Acute oral toxicity

LD50 (Colinus virginianus (Bobwhite quail)): 2,250 mg/kg

calcium dodecylbenzenesulphonate:

Toxicity to fish : LC50 (Danio rerio (zebra fish)): 10 mg/l

Benevia™ Insect Control



Version Revision Date: SDS Number: Date of last issue: -

1.1 05/23/2023 50000912 Date of first issue: 02/01/2018

Exposure time: 96 h

Method: OECD Test Guideline 203

Remarks: Based on data from similar materials

LC50 (Pimephales promelas (fathead minnow)): 4.6 mg/l

Exposure time: 96 h

Remarks: Based on data from similar materials

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 3.5 mg/l

Exposure time: 48 h

Method: OECD Test Guideline 202

Remarks: Based on data from similar materials

Toxicity to algae/aquatic

plants

NOEC (Pseudokirchneriella subcapitata (green algae)): 7.9

mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

Remarks: Based on data from similar materials

EC50 (Pseudokirchneriella subcapitata (green algae)): 65.4

mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

Remarks: Based on data from similar materials

Toxicity to daphnia and other : aquatic invertebrates (Chron-

ic toxicity)

NOEC (Daphnia magna (Water flea)): 1.65 mg/l

Exposure time: 21 d

Remarks: Based on data from similar materials

NOEC (Daphnia magna (Water flea)): 1.18 mg/l

Exposure time: 21 d

Remarks: Based on data from similar materials

Toxicity to microorganisms : EC50 (activated sludge): 500 mg/l

Exposure time: 3 h

Method: OECD Test Guideline 209

Toxicity to soil dwelling or-

ganisms

LC50 (Eisenia fetida (earthworms)): 1,000 mg/kg

Exposure time: 14 d

Method: OECD Test Guideline 207

Toxicity to terrestrial organ-

isms

LD50 (Colinus virginianus (Bobwhite quail)): 1,356 mg/kg

Exposure time: 14 d

Method: OECD Test Guideline 223

2-ethylhexan-1-ol:

Toxicity to fish : LC50 (Leuciscus idus (Golden orfe)): 17.1 - 28.2 mg/l

Exposure time: 96 h

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 39 mg/l

Exposure time: 48 h

Toxicity to algae/aquatic

plants

EC10 (Desmodesmus subspicatus (green algae)): 3.2 mg/l

Exposure time: 72 h

Benevia™ Insect Control



Version Revision Date: SDS Number: Date of last issue: -

1.1 05/23/2023 50000912 Date of first issue: 02/01/2018

EC50 (Desmodesmus subspicatus (green algae)): 11.5 mg/l

Exposure time: 72 h

Toxicity to microorganisms : EC50 (Anabaena flos-aquae (cyanobacterium)): 16.6 mg/l

Exposure time: 72 h

Aerosil:

Toxicity to fish : LC50 (Brachydanio rerio (zebrafish)): > 10,000 mg/l

Exposure time: 96 h

Method: OECD Test Guideline 203

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): > 1,000 mg/l

Exposure time: 24 h

Persistence and degradability

Product:

Biodegradability : Remarks: Product contains minor amounts of not readily bio-

degradable components, which may not be degradable in

waste water treatment plants.

Components:

Cyantraniliprole:

Biodegradability : Remarks: Not readily biodegradable.

calcium dodecylbenzenesulphonate:

Biodegradability : Result: Readily biodegradable.

Method: OECD Test Guideline 301E

2-ethylhexan-1-ol:

Biodegradability : Result: Readily biodegradable.

Aerosil:

Biodegradability : Remarks: The methods for determining the biological degra-

dability are not applicable to inorganic substances.

Bioaccumulative potential

Product:

Bioaccumulation : Remarks: No data is available on the product itself.

Remarks: No data available

Components:

Cyantraniliprole:

Bioaccumulation : Species: Lepomis macrochirus (Bluegill sunfish)

Bioconcentration factor (BCF): < 1

Benevia™ Insect Control



Version Revision Date: SDS Number: Date of last issue: -

1.1 05/23/2023 50000912 Date of first issue: 02/01/2018

Remarks: Bioaccumulation is unlikely.

Bioconcentration factor (BCF): 15

Partition coefficient: n-

octanol/water

log Pow: 1.97 (72 °F / 22 °C)

pH: 4

log Pow: 2.07 (72 °F / 22 °C)

pH: 7

log Pow: 1.74 (72 °F / 22 °C)

pH: 9

calcium dodecylbenzenesulphonate:

Bioaccumulation : Species: Fish

Bioconcentration factor (BCF): 70.79

Method: QSAR

Partition coefficient: n-

octanol/water

log Pow: 4.77 (77 °F / 25 °C)

2-ethylhexan-1-ol:

Partition coefficient: n-

octanol/water

log Pow: 2.9 (77 °F / 25 °C)

Mobility in soil

Product:

Distribution among environ-

mental compartments

Remarks: No data is available on the product itself.

Components:

Cyantraniliprole:

Distribution among environ-

mental compartments

Koc: 241 ml/g, log Koc: 2.38 Remarks: Mobile in soils

Other adverse effects

Product:

Ozone-Depletion Potential : Regulation: 40 CFR Protection of Environment; Part 82 Pro-

tection of Stratospheric Ozone - CAA Section 602 Class I

Substances

Remarks: This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

Additional ecological infor-

mation

: An environmental hazard cannot be excluded in the event of

unprofessional handling or disposal.

Very toxic to aquatic life with long lasting effects.

Benevia™ Insect Control



Version **Revision Date:** SDS Number: Date of last issue: -

05/23/2023 50000912 Date of first issue: 02/01/2018 1.1

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues The product should not be allowed to enter drains, water

courses or the soil.

Do not contaminate ponds, waterways or ditches with chemi-

cal or used container.

Send to a licensed waste management company.

SECTION 14. TRANSPORT INFORMATION

International Regulations

UNRTDG

UN number UN 3082

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, Proper shipping name

N.O.S.

(Cyantraniliprole)

Class 9 Packing group Ш 9 Labels

IATA-DGR

UN/ID No. UN 3082

Proper shipping name Environmentally hazardous substance, liquid, n.o.s.

(Cyantraniliprole)

9 Class Packing group Ш

Labels Miscellaneous

Packing instruction (cargo

aircraft)

Packing instruction (passen-

ger aircraft)

964

Environmentally hazardous yes

IMDG-Code

UN number UN 3082

Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S.

(Cyantraniliprole)

Class 9 Ш Packing group Labels 9 **EmS Code** F-A, S-F Marine pollutant yes

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

Domestic regulation

49 CFR

Not regulated as a dangerous good

Shipment by ground under DOT is non-regulated; however it Remarks

may be shipped per the applicable hazard classification to

Benevia™ Insect Control



Version Revision Date: SDS Number: Date of last issue: -

1.1 05/23/2023 50000912 Date of first issue: 02/01/2018

facilitate multi-modal transport involving ICAO (IATA) or IMO.

Special precautions for user

Remarks : Shipment by ground under DOT is non-regulated; however it

may be shipped per the applicable hazard classification to facilitate multi-modal transport involving ICAO (IATA) or IMO.

49CFR: no dangerous good in non-bulk packaging

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

SECTION 15. REGULATORY INFORMATION

CERCLA Reportable Quantity

Components	CAS-No.	Component RQ Calculated product RC	
		(lbs)	(lbs)
methanol	67-56-1	100	100 (F003)

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

This material does not contain any components with a section 302 EHS TPQ.

SARA 311/312 Hazards : No SARA Hazards

SARA 313 : This material does not contain any chemical components with

known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Clean Air Act

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

The following chemical(s) are listed under the U.S. Clean Air Act Section 111 SOCMI Intermediate or Final VOC's (40 CFR 60.489):

2-ethylhexan-1-ol 104-76-7 >= 5 - < 10 %

Clean Water Act

The following Hazardous Substances are listed under the U.S. CleanWater Act, Section 311, Table 116.4A:

calcium dodecylben- 26264-06-2 >= 10 - < 20 %

zenesulphonate

The following Hazardous Chemicals are listed under the U.S. CleanWater Act, Section 311, Table 117.3:

calcium dodecylben- 26264-06-2 >= 10 - < 20 % zenesulphonate

18 / 22





Version Revision Date: SDS Number: Date of last issue: -

1.1 05/23/2023 50000912 Date of first issue: 02/01/2018

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section

307

This product does not contain any priority pollutants related to the U.S. Clean Water Act

US State Regulations

Massachusetts Right To Know

calcium dodecylbenzenesulphonate 26264-06-2 2-ethylhexan-1-ol 104-76-7

Pennsylvania Right To Know

Fatty acids, soya, Me esters 68919-53-9 calcium dodecylbenzenesulphonate 26264-06-2 Castoroil, polyethoxylated 61791-12-6 Cyantraniliprole 736994-63-1 2-ethylhexan-1-ol 104-76-7 Polyoxyethylene sorbitol hexaoleate 57171-56-9 water 7732-18-5 methanol 67-56-1

Maine Chemicals of High Concern

Product does not contain any listed chemicals

Vermont Chemicals of High Concern

Product does not contain any listed chemicals

Washington Chemicals of High Concern

Product does not contain any listed chemicals

California Prop. 65

WARNING: This product can expose you to chemicals including methanol, which is/are known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

California List of Hazardous Substances

calcium dodecylbenzenesulphonate 26264-06-2

California Permissible Exposure Limits for Chemical Contaminants

Aerosil 112945-52-5

The ingredients of this product are reported in the following inventories:

TCSI : On the inventory, or in compliance with the inventory

TSCA : Product contains substance(s) not listed on TSCA inventory.

AIIC : Not in compliance with the inventory

DSL : This product contains the following components that are not

on the Canadian DSL nor NDSL.

Fatty acids, C6-10, Me esters

ENCS : Not in compliance with the inventory

ISHL : Not in compliance with the inventory

Benevia™ Insect Control



Version Revision Date: SDS Number: Date of last issue: -

1.1 05/23/2023 50000912 Date of first issue: 02/01/2018

KECI : Not in compliance with the inventory

PICCS : Not in compliance with the inventory

IECSC : Not in compliance with the inventory

NZIoC : Not in compliance with the inventory

TECI: Not in compliance with the inventory

TSCA list

No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

SECTION 16. OTHER INFORMATION

Further information

NFPA 704:

Flammability Health 2 0 Instability

Special hazard

0 No health threat, 1 Slightly Hazardous, 2Hazardous, 3 Extreme danger, 4 Deadly

HMIS® IV:



HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. The "*" represents a chronic hazard, while the "/" represents the absence of a chronic hazard.

Full text of other abbreviations

ACGIH : USA. ACGIH Threshold Limit Values (TLV)
NIOSH REL : USA. NIOSH Recommended Exposure Limits

OSHA Z-3 : USA. Occupational Exposure Limits (OSHA) - Table Z-3 Min-

eral Dusts

ACGIH / TWA : 8-hour, time-weighted average

NIOSH REL / TWA : Time-weighted average concentration for up to a 10-hour

workday during a 40-hour workweek

OSHA Z-3 / TWA : 8-hour time weighted average

Benevia™ Insect Control



Version Revision Date: SDS Number: Date of last issue: -

1.1 05/23/2023 50000912 Date of first issue: 02/01/2018

AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI -Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ -Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

Disclaimer

FMC Corporation believes that the information and recommendations contained herein (including data and statements) are accurate as of the date hereof. You can contact FMC Corporation to insure that this document is the most current available from FMC Corporation. No warranty of fitness for any particular purpose, warranty of merchantability or any other warranty, expressed or implied, is made concerning the information provided herein. The information provided herein relates only to the specified product designated and may not be applicable where such product is used in combination with any other materials or in any process. The user is responsible for determining whether the product is fit for a particular purpose and suitable for the user's conditions and methods of use. Since the conditions and methods of use are beyond the control of FMC Corporation, FMC Corporation expressly disclaims any and all liability as to any results obtained or arising from any use of the products or reliance on such information.

US / EN

Prepared by:

FMC Corporation

FMC and the FMC Logo are trademarks of FMC Corporation and/or an affiliate.

Benevia™ Insect Control



Version Revision Date: SDS Number: Date of last issue: -

1.1 05/23/2023 50000912 Date of first issue: 02/01/2018

© 2021-2023 FMC Corporation. All Rights Reserved.

End of Material Safety Data Sheet