

SAFETY DATA SHEET



Benevia™ Insect Control

Version 1.0

Revision Date 2018.01.03

Document no. 130000050174

This SDS adheres to the standards and regulatory requirements of Korea and may not meet the regulatory requirements in other countries.

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product name : Benevia™ Insect Control

Other names : B12901515

Recommended use of the chemical and restriction on use

Recommended use : Insecticide

Supplier identification

Company : FMC Korea Ltd.

Street address : 7th floor, Mijin Building, 111, Dogok-ro, Gangnam-gu, Seoul 06253, Republic of Korea

Telephone : +82-2-539-6411

Telefax : +82-2-567-4662

Emergency telephone number : +82-2-539-6411 for working time.
There is no emergency telephone no. for 24hours.

2. HAZARDS IDENTIFICATION

Product hazard classification

Skin sensitisation : Category 1

Acute aquatic toxicity : Category 1

Chronic aquatic toxicity : Category 1

Endpoints which are not classified, cannot be classified or are not applicable are not shown.

Label content

Pictogram :



Signal word : Warning

Hazard statements : May cause an allergic skin reaction.
Very toxic to aquatic life with long lasting effects.

Precautionary statements : Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
Contaminated work clothing should not be allowed out of the workplace.
Wear protective gloves.
IF ON SKIN: Wash with plenty of soap and water.
Specific treatment (see supplemental first aid instructions on this label).
If skin irritation or rash occurs: Get medical advice/ attention.
Wash contaminated clothing before reuse.
Collect spillage.

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Dispose of contents/ container to an approved waste disposal plant.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature : Mixture

Components

| Chemical Name | Other names | CAS-No. | Concentration |
|-------------------|---------------------------|-------------|---------------|
| Cyantraniliprole | No information available. | 736994-63-1 | 10.26 % |
| Other Ingredients | No information available. | | 89.74 % |

4. FIRST AID MEASURES

Never give anything by mouth to an unconscious person.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

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 poison control center or doctor for treatment advice.

Skin contact : Take off all contaminated clothing immediately. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

Inhalation : Remove person to fresh air. If signs/symptoms continue, get medical attention. Artificial respiration and/or oxygen may be necessary. Call a poison control center or doctor for treatment advice.

Ingestion : No specific intervention is indicated as the compound is not likely to be hazardous. Not a probable route of exposure. However, in case of accidental ingestion, call a physician. DO NOT induce vomiting unless directed to do so by a physician or poison control center. If victim is conscious: Rinse mouth with water.

Most important symptoms/effects, acute and delayed : No information available.

Protection of first-aiders : No information available.

Indication of immediate medical attention and notes for physician : No information available.

5. FIREFIGHTING MEASURES

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

Unsuitable extinguishing media : High volume water jet, (contamination risk)

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- Specific hazards arising from the chemical** : The product is not flammable.
- Special protective equipment for firefighters** : In the event of fire, wear self-contained breathing apparatus. Use personal protective equipment.
- Specific extinguishing methods** : No information available.
- Further information** : Prevent fire extinguishing water from contaminating surface water or the ground water system. 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.
(on small fires) If area is heavily exposed to fire and if conditions permit, let fire burn itself out since water may increase the area contaminated. Cool containers / tanks with water spray.

6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures** : Evacuate personnel, thoroughly ventilate area, use self-contained breathing apparatus. Use personal protective equipment.
- Environmental precautions and protective procedures** : Prevent material from entering sewers, waterways, or low areas.
- Methods and materials for containment and cleaning up** : Soak up with sawdust, sand, oil dry or other absorbent material. Dispose of in an approved container. If liquid has been spilt in large quantities clean up promptly by scoop or vacuum.
- Additional advice** : Never return spills in original containers for re-use. Dispose of in accordance with local regulations.

7. HANDLING AND STORAGE

Handling

- Technical measures/Precautions** : Wash hands before breaks and immediately after handling the product. Remove and wash contaminated clothing before re-use.
- Precautions for safe handling** : The product is not flammable.

Storage

- Conditions for safe storage, including any incompatibilities** : Store product in original container only in a location inaccessible to children and pets. Do not contaminate water, other pesticides, fertilizer, food or feed in storage. Not for use or storage in or around the home. Keep out of the reach of children.
- Storage period: Storage temperature: > 0 °C

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

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No information available.

Appropriate engineering controls : Ensure adequate ventilation, especially in confined areas.

Biological occupational exposure limits : No information available.

Personal protective equipment

Respiratory protection : Where there is potential for airborne exposures in excess of applicable limits, wear approved respiratory protection with dust/mist cartridge.

Eye protection : Wear protective eyewear to prevent contact with this substance.

Hand protection : Material: Protective gloves

Body Protection : Wear protective clothing such as gloves, apron, boots, or coveralls, as appropriate.

Hygiene measures : Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove clothing/PPE immediately if material gets inside. Wash thoroughly and put on clean clothing.

Protective measures : Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance (Physical state, form, colour, etc.)

Physical state : liquid
Form : liquid dispersion
Colour : off-white

Odour : mild oily

Odour Threshold : No information available.

pH : 5.1 (10 g/l)

Melting point/freezing point

Melting point/range : not applicable

Initial boiling point and boiling range

Boiling point/boiling range : 99 °C

Flash point : No flash up to boiling point.

Evaporation rate : No information available.

Flammability (solid, gas) : The product is not flammable.

Upper/lower flammability or explosive limits

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Upper explosion limit : No information available.
Lower explosion limit : No information available.

Vapour pressure : No information available.

Solubility(ies)
Water solubility : dispersible

Vapour density : No information available.

Density
Density : 0.965 - 0.985 GJ

Partition coefficient: n-octanol/water : No information available.

Auto-ignition temperature
Self ignition : 254 °C
Auto-ignition temperature

Decomposition temperature : No information available.

Viscosity
Viscosity, kinematic : No information available.

Molecular weight : No information available.

10. STABILITY AND REACTIVITY

Reactivity : No information available.

Chemical stability : Stable at normal temperatures and storage conditions.

Possibility of hazardous reactions : No information available.

Conditions to avoid : Protect from frost.

Incompatible materials : No materials to be especially mentioned.

Hazardous decomposition products : No information available.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Respiratory system Refer to below subheading
Oral Refer to below subheading
Eye/Skin contact Refer to below subheading

Acute toxicity

Oral
Benevia™ Insect Control : LD50/rat: > 5,000 mg/kg
Inhalation
Benevia™ Insect Control : LC50/4 h/rat(dust/mist): 3.3 mg/l

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| | |
|--|--|
| Dermal | The substance or mixture has no acute inhalation toxicity |
| Benevia™ Insect Control | : LD50/rat: > 5,000 mg/kg |
| Skin corrosion/irritation | |
| Benevia™ Insect Control | : Species: rabbit Result: No skin irritation |
| Serious eye damage/eye irritation | |
| Benevia™ Insect Control | : Species: rabbit Result: No eye irritation |
| Respiratory or skin sensitisation | |
| Benevia™ Insect Control | : Species: multiple species Result: May cause sensitisation by skin contact. |
| Carcinogenicity | |
| Cyantraniliprole | : Not classifiable as a human carcinogen. |
| Germ cell mutagenicity | |
| Cyantraniliprole | : Tests on bacterial or mammalian cell cultures did not show mutagenic effects. |
| Reproductive toxicity | |
| Cyantraniliprole | : Reproductive toxicity: No toxicity to reproduction Teratogenicity: Animal testing showed effects on embryo-fetal development at levels equal to or above those causing maternal toxicity. |
| Specific Target Organ Toxicity | |
| Specific target organ toxicity - single exposure | |
| Cyantraniliprole | : The substance or mixture is not classified as specific target organ toxicant, single exposure. |
| Specific target organ toxicity - repeated exposure | |
| Benevia™ Insect Control | : Refer to repeated dose toxicity data for more information on target organs if applicable. |
| Aspiration hazard | |
| Cyantraniliprole | : No aspiration toxicity classification |
| Other | |
| Cyantraniliprole | : Repeated dose toxicity: The following effects occurred at levels of exposure that significantly exceed those expected under labeled usage conditions. Oral/rat 28 - 90 d Thyroid effects, Organ weight changes, No effect to neurotoxicity. Dermal/rat 28 d No toxicologically significant effects were found. Oral/mouse 90 d No toxicologically significant effects were found. Oral/dog 90 d altered blood chemistry, Liver effects Oral/multiple species Immune System, No toxicologically significant effects were found. Oral/dog 365 d NOAEL: 5.67 mg/kg Liver effects, Gallbladder effects |

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12. ECOLOGICAL INFORMATION

Ecotoxicity

Acute and prolonged toxicity to fish

Cyantraniliprole : LC50/96 h/Oncorhynchus mykiss (rainbow trout): > 12.6 mg/l
LC50/96 h/Lepomis macrochirus (Bluegill sunfish): > 13 mg/l

Toxicity to aquatic plants

Cyantraniliprole : ErC50/72 h/Pseudokirchneriella subcapitata (green algae): > 13 mg/l
ErC50/7 d/Lemna gibba (duckweed): > 12.1 mg/l

Acute toxicity to aquatic invertebrates

Benevia™ Insect Control : EC50/48 h/Daphnia magna (Water flea): 0.215 mg/l

Chronic toxicity to aquatic Invertebrates

Cyantraniliprole : NOEC/21 d/Daphnia magna (Water flea): 0.00969 mg/l

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Mobility in soil

No information available.

Other adverse effects

Benevia™ Insect Control : See product label for additional application instructions relating to environmental precautions.

13. DISPOSAL CONSIDERATIONS

Waste disposal methods : In accordance with local and national regulations. The product should not be allowed to enter drains, water courses or the soil.

Disposal precaution (including the disposal method of contaminated container and packaging) : Do not re-use empty containers.

14. TRANSPORT INFORMATION

IMDG

UN number : 3082
Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(Cyantraniliprole)
Class : 9
Packing group : III
Marine pollutant : yes

IATA

UN number : 3082
Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

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(Cyantraniliprole)

Class : 9
Packing group : III

Matters needing attention : not applicable
for transportation

15. REGULATORY INFORMATION

Industrial Safety and Health Act
not regulated

Toxic Chemicals Control Act
not regulated

Dangerous Substance Safety Management Act
not regulated

Waste Control Act
Dispose of in accordance with local regulations.

Regulations in other countries
No information available.

16. OTHER INFORMATION

References

MSDS Number: 130000050174

This MSDS is translated to Korean by FMC in accordance with Korea ISHA requirements based on the global MSDS of the FMC Company.

Revision Date/Version

Date of first preparation : 2018.01.03
Revision Date : 2018.01.03
Version : 2.2

Significant change from previous version is denoted with a double bar.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The above information relates only to the specific material(s) designated herein and may not be valid for such material(s) used in combination with any other materials or in any process or if the material is altered or processed, unless specified in the text.