L1061940 GBRI/4Y PPE 4120404 0777/2020

Minecto™ One

syngenta®

Product registration number: MAPP 18649

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A water dispersible granule formulation containing 400 g/kg cyantraniliprole.

For the control of insect pests in Broccoli/calabrese, Brussels sprout, cabbage, cauliflower, swede, turnip, carrot, parsnip, salsify, parsley root, horseradish, celeriac, edible podded peas, vining peas, lettuce, bulb onions, garlic, shallots and salad onion.

The (COSHH) Control Of Substances Hazardous to Health regulations may apply to the use of this product at work.

In case of toxic or transport emergency ring +44 (0)1484 538444 any time

Syngenta UK Limited
CPC4, Capital Park, Fulbourn, Cambridge, CB21 5XE
Tel: Cambridge (01223) 883400

This product label is compliant with the CPA Voluntary Initiative (VI) guidance.

The Voluntary Initiative

800g

®

MINECTO™ One

A water dispersible granule formulation containing 400 g/kg cyantraniliprole.

Warning

Very toxic to aquatic life with long lasting effects.

Avoid release to the environment.

Collect spillage.

Dispose of contents/container to a licensed hazardous-waste disposal contractor or collection site except for empty triple rinsed clean containers which can be disposed of as non-hazardous waste.

To avoid risks to human health and the environment, comply with the instructions for use.

MAPP 18649

IMPORTANT INFORMATION - FOR USE ONLY AS A PROFESSIONAL INSECTICIDE

Crops	Maximum individual dose (g product/ha)	Maximum total dose (g product/ ha/crop).	Latest time of application	Aquatic buffer zone distance (metres)
Broccoli/calabrese, Brussels sprout, cabbage, cauliflower, swede, turnip	185	370	3 days before harvest	5
Bulb onions, garlic, shallots, salad onion	310	310	14 days before harvest	5
Lettuce (outdoor)	185	370	7 days before harvest	5
Carrot, parsnip, salsify, parsley root, horseradish, celeriac	185	370	7 days before harvest	5
Edible podded pea, Vining pea	185	370	3 days before harvest	5

Other specific restrictions:

The following minimum intervals between applications must be observed:

7 days for Brussels sprout, cabbage, cauliflower, broccoli, calabrese, swede, turnip, edible podded peas, vining peas and outdoor lettuce.

When used on crops with a greater than 5m aquatic buffer zone, this product must not be applied via hand-held equipment. The maximum total dose of MINECTO ONE per crop must not be exceeded in any calendar year. Any land treated with MINECTO ONE at the maximum total dose must not be treated with any other cyantraniliprole containing products in the same calendar year, including either foliar applications in the growing crop or drench treatments to transplants applied pre-planting.

READ THE LABEL BEFORE USE. USING THIS PRODUCT IN A MANNER THAT IS INCONSISTENT WITH THE LABEL MAY BE AN OFFENCE. FOLLOW THE CODE OF PRACTICE FOR USING PLANT PROTECTION PRODUCTS.

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SAFETY PRECAUTIONS

(a) Operator protection

Engineering control of operator exposure must be used where reasonably practicable in addition to the following personal protective equipment:-

WEAR SUITABLE PROTECTIVE CLOTHING (COVERALLS) AND SUITABLE PROTECTIVE GLOVES when applying by hand-held equipment.

WEAR SUITABLE PROTECTIVE GLOVES when handling the concentrate or handling contaminated surfaces. However, engineering controls may replace personal protective equipment if a COSHH assessment shows they provide an equal or higher standard of protection.

WASH CONCENTRATE from skin or eyes immediately.

WASH HANDS AND EXPOSED SKIN before meals and after work.

WASH ALL PROTECTIVE CLOTHING thoroughly after use, especially the insides of gloves.

IF YOU FEEL UNWELL, seek medical advice (show the label where possible).

(b) Environmental protection

Do not contaminate water with the product or its container. Do not clean application equipment near surface water. Avoid contamination via drains from farmyards and roads.

To protect aquatic organisms respect an unsprayed buffer zone distance to surface water bodies as specified for the crop.

DO NOT ALLOW DIRECT SPRAY from horizontal boom sprayers to fall within 5 m to the top of the bank of a static or flowing water body, or within 1 m of the top of a ditch which is dry at the time of application. Aim spray away from water. NOTE: BUFFER ZONES OF MORE THAN 5 M CANNOT BE REDUCED UNDER THE LOCAL ENVIRONMENT RISK ASSESSMENT FOR PESTICIDES (LERAP) SCHEME.

The statutory buffer zone must be maintained and the distance recorded in Section A of the LERAP record form. The LERAP record form must be kept available for three years.

RISK TO NON-TARGET INSECTS OR OTHER ARTHROPODS. See Directions for use.

DANGEROUS TO BEES. To protect bees and pollinating insects do not apply to crop plants when in flower. Do not use where bees are actively foraging. Do not apply when flowering weeds are present.

(c) Storage and disposal

KEEP IN ORIGINAL CONTAINER, tightly closed in a safe place.

RINSE CONTAINER THOROUGHLY by using an integrated pressure rinsing device or manually rinsing three times. Add washings to sprayer at time of filling and dispose of safely.

DO NOT RE-USE CONTAINER for any purpose.

DIRECTIONS FOR USE

IMPORTANT: This information is approved as part of the Product Label. All instructions within this section must be carefully read in order to obtain safe and successful use of this product.

Avoid spraying within 5 m of the field boundary1 to reduce effects on non-target insects or other arthropods.

[1] These buffer distances should be measured from the field boundary, which for the purposes of this labelling, is defined as from the edge of non-cropped land (i.e. land taken permanently out of agricultural production, including the 1-2 m strips adjacent to hedgerows and watercourses established under the Single Payment Scheme). Cropped land includes managed buffer strips (e.g. grass strips, wild flower margins and conservation headlands), but since these are usually set up as havens for wildlife it is best practice to minimise spray drift onto them.

RESISTANCE

When insecticides with the same mode of action are used repeatedly over several years in the same field, naturally occurring less sensitive strains may survive, propagate and become dominant in that field. An insect is considered resistant to an insecticide if it survives a correctly applied treatment at the recommended dose and timing under normal weather conditions and a validation test with a suitable bioassay confirms the lack of activity. When resistance occurs, recommended rates fail to suppress the pest population below economic thresholds. Development of resistance can be avoided or delayed by alternating or mixing products having different modes of action. Tank-mixtures with other effective insecticides for the target pests may also be recommended. For additional information on insect resistance monitoring, visit the Insecticide Resistance Action Committee (IRAC) on the web at (www.irac-online.org).

MINECTO ONE is an IRAC Group 28 Insecticide (ryanodine receptor modulator - diamide). Repeated and exclusive use of MINECTO ONE may lead to the build-up of resistant strains of insects in some crops. Some insects are known to develop resistance to products used repeatedly for control. Because the development of resistance cannot be predicted, this product may be used as part of resistant management strategies established for the use area. These strategies may include incorporation of cultural and biological control practices, alternation of mode-of-action classes of insecticides on succeeding generations and targeting the most susceptible life stage. Consult your local or area agricultural authorities for details, and follow the recommended IRAC guidance for use of ryanodine receptor modulator – diamide insecticides (www.irac-online.org).

Best practices for resistance management of Group 28 insecticides include;

- Avoid using the same mode of action (same IRAC group number) on consecutive generations of insect pests.
- Make no more than 2 applications of Group 28 products per generation to the same insect species on a crop. Application to the next generation of target pest(s) must be with an effective product with a different mode of action (non-Group 28 insecticide).
- Make no more than two successive applications of any diamide within a 30 day period to the same insect species on a crop. The following application to the target pest(s) must be with an effective product with a different mode of action (non-Group 28 insecticide).
- Avoid using less than the labelled rates of MINECTO ONE.
- Target the most susceptible insect life stages, whenever possible.
- Monitor insect populations for product effectiveness. If resistance to this product develops in your area, this product, or other products with a similar mode of action, may not provide adequate control.
- If poor performance cannot be attributed to improper application or extreme weather conditions, a resistant strain of insect may be present. If you experience difficulty with control and resistance is a reasonable cause, immediately consult your supplier or agricultural advisor for the best alternate method of control for your area.

GENERAL INFORMATION

MINECTO ONE acts as a multi-pest insecticide for the control of a range of sucking (thrips) and chewing pests (lepidoptera, and root flies) in diverse field crops. The primary route of entry into target insects is through ingestion, with secondary entry via absorption through the cuticle.

CROP SPECIFIC INFORMATION

BRUSSELS SPROUT, CABBAGE, CAULIFLOWER, BROCCOLI, CALABRESE, SWEDE AND TURNIP

Caterpillars *(Autographa gamma (Silver-Y), Mamestra brassicae, Pieris brassicae, Pieris rapae, Plutella Xylostella)*	
Timing: Apply at first sign of attack. Repeat if necessary. A maximum of 2 applications are permitted, with a minimum interval of 7 days between treatments. Apply first at 2 leaves unfolded (BBCH 12) and a second time between first side shoot visible (BBCH 21) and first individual flowers visible (BBCH 55).	
RATE OF USE 185 g/ha	**WATER VOLUME** 200-1000 l/ha (Use sufficient water volume to ensure thorough crop penetration. Consider applying to Brussels Sprouts through a drop-leg sprayer.)
Cabbage Root Fly *(Delia radicum)*	
Timing: Apply at first sign of attack. Repeat if necessary. A maximum of 2 applications are permitted, with a minimum interval of 7 days between treatments.	
RATE OF USE 185 g/ha	**WATER VOLUME** 200-1000 l/ha (Use sufficient water volume to ensure thorough crop penetration. Consider applying to Brussels Sprouts through a drop-leg sprayer.)
Qualified label recommendation Based on limited effectiveness and crop safety data, MINECTO ONE may provide some useful control of cabbage root fly on swede and turnip.	

BULB ONIONS, GARLIC, SHALLOTS, SALAD ONION

Onion Thrips *(Thrips tabaci)*	
Timing: Apply at first sign of attack. A maximum of 1 application is permitted. Apply from second leaf stage (BBCH 12) up to before all leaves dead and bulb elongates (BBCH 49).	
RATE OF USE 310 g/ha	**WATER VOLUME** 300-1000 l/ha

OUTDOOR LETTUCE

Caterpillars *(Autographa gamma (Silver-Y), Mamestra brassicae)*	
Timing: Apply at first sign of attack. Apply from 2 leaves unfolded (BBCH 12) until typical size form and firmness of heads/typical leaf mass (BBCH 49). Repeat if necessary. A maximum of 2 applications are permitted, with a minimum interval of 7 days between treatments.	
RATE OF USE 185 g/ha	**WATER VOLUME** 300-1000 l/ha (Use sufficient water volume to ensure thorough crop penetration.)

CARROT, PARSNIP, SALSIFY, PARSLEY ROOT, HORSERADISH, CELERIAC

Carrot Fly (*Psila rosae*)	
Timing: For useful levels of control of damage to roots caused by second generation. A maximum of 2 applications are permitted. Apply from after 9 true leaves unfolded (BBCH 19) until the typical size of roots has been reached (BBCH 49).	
Timing: MINECTO ONE is active against adult flies, but not larvae in the soil or carrot root. The first application of MINECTO ONE should be applied one week before the forecast of 10% (first) egg-laying. Contact HRI or your specialist advisor for details. Subsequent applications should be made at 12-14 day intervals until the risk from carrot fly has passed. Maintain a regular programme of sprays to reduce the incidence of egg laying as far as possible. The optimum time for application is 4 – 6 pm on warm days.	
RATE OF USE 185 g/ha	**WATER VOLUME** 300 - 1000 l/ha

EDIBLE PODDED AND VINING PEAS

Pea Moth (*Cydia nigricana*)	
Timing: Apply from after the end of flowering (BBCH 69) until the peas are fully formed (BBCH 79). Apply as indicated by regular monitoring of pheromone traps. Apply a second treatment 10-14 days after the first. A maximum of 2 applications are permitted.	
RATE OF USE 185 g/ha	**WATER VOLUME** 200 - 1000 l/ha

This product is to be used only in accordance with the recommendations and instructions provided with this pack. Use in any other circumstances is entirely at user's risk.

MIXING AND SPRAYING

Preparation of sprayer: Part fill the spray tank with clean water and start agitation. Shake the container and add the correct amount of MINECTO ONE to the sprayer using a filling device (eg. induction bowl, probe etc.) or by direct addition to the spray tank.

Immediately after use, clean the spray equipment thoroughly. Drain the system completely and rinse spray tank, boom and nozzles two to three times with clean water until the foam and all traces of product have been removed.

Wash out container thoroughly. Preferably use an integrated pressure rinsing device or manually rinse three times. Add washings to the sprayer at the time of filling. Dispose of rinsed container safely according to DEFRA Code of Practice.

Spraying: Ensure adequate volume and pressure is used and that the sprayer is correctly calibrated before use. Do not leave the spray liquid in the sprayer for long periods (i.e. during meals or overnight). Effectiveness using three star drift reduction technology may be reduced.

Consult processors before using on pea crops grown for processing.

Advice should be included regarding the appropriate spray pressure and spray quality (BCPC). The wording is left to the discretion of the applicant.

Section 6 of the Health and Safety at Work Act
Additional Product Safety Information

(This section does not form part of the product label under the Plant Protection Products Regulations 1995.)

The product label provides information on a specific pesticidal use of the product; do not use otherwise, unless you have assessed any potential hazard involved, the safety measures required and that the particular use has 'extensions of use' approval or is otherwise permitted under the Plant Protection Products Regulations.

The information on this label is based on the best available information including data from test results.

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

1.1 Product Identifier

Product Name: MINECTO ONE

Design Code: A16971B

Product Registration number: MAPP 18649

1.2 Relevant Identified Uses of the substance or mixture and uses advised against

Use of the Substance/Mixture: Insecticide

1.3 Details of the supplier of the safety data sheet

Company: Syngenta UK Limited
CPC4, Capital Park
Fulbourn, Cambridge CB21 5XE
United Kingdom

Telephone: +44 (0) 1223 883400

Telefax: +44 (0) 1223 882195

E-mail address of person responsible for the SDS: customer.services@syngenta.com

1.4 Emergency telephone number

Emergency phone No.: +44 1484 538444

SECTION 2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Short-term (acute) aquatic hazard, Category 1	H400: Very toxic to aquatic life.
Long-term (chronic) aquatic hazard, Category 1	H410: Very toxic to aquatic life with long lasting effects.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms

Signal Word	Warning	
Hazard Statements	H411	Toxic to aquatic life with long lasting effects.
Supplemental Hazard Statements	EUH401	To avoid risks to man and the environment, comply with the instructions for use.
Precautionary Statements	**Prevention:**	
	P273	Avoid release to the environment.
	Response:	
	P391	Collect spillage.
	Disposal:	
	P501	Dispose of contents/container to a licensed hazardous-waste disposal contractor or collection site except for empty triple rinsed clean containers which can be disposed of as non-hazardous waste.

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher. May form combustible dust concentrations in air.

SECTION 3. COMPOSITION / INFORMATION ON INGREDIENTS

3.2 Mixtures

Hazardous Components

Chemical Name	CAS-No. EC-No. Index-No. Registration number	Classification	Concentration (% w/w)
cyantraniliprole	736994-63-1	Aquatic Acute 1; H400 Aquatic Chronic 1; H410	>= 30 - < 50

For explanation of abbreviations see section 16.

SECTION 4. FIRST-AID MEASURES

4.1 Description of first aid measures

General advice: Have the product container, label or Material Safety Data Sheet with you when calling the Syngenta emergency number, a Poison Control Centre or physician, or going for treatment.
If inhaled: Move the victim to fresh air. If breathing is irregular or stopped, administer artificial respiration. Keep patient warm and at rest. Call a physician or poison control centre immediately.
In case of skin contact: Take off all contaminated clothing immediately. Wash off immediately with plenty of water. If skin irritation persists, call a physician. Wash contaminated clothing before re-use.
In case of eye contact: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses. Immediate medical attention is required.
If swallowed: If swallowed, seek medical advice immediately and show this container or label. Do NOT induce vomiting.

4.2 Most Important symptoms and effects, both acute and delayed

Symptoms: Nonspecific. No symptoms known or expected

4.3 Indication of any immediate medical attention and special treatment needed

Treatment: There is no specific antidote available. Treat symptomatically.

SECTION 5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media:
Extinguishing media - small fires
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Extinguishing media - large fires
Alcohol-resistant foam or Water spray
Unsuitable extinguishing media: Do not use a solid water stream as it may scatter and spread fire.

5.2 Special hazards arising from the substance or mixture

Specific hazards during fire-fighting: As the product contains combustible organic components, fire will produce dense black smoke containing hazardous products of combustion (see section 10). Exposure to decomposition products may be a hazard to health.

5.3 Advice for fire-fighters

Special protective equipment for firefighters: Wear full protective clothing and self-contained breathing apparatus.
Further information: Do not allow run-off from fire fighting to enter drains or water courses. Cool closed containers exposed to fire with water spray.

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions: Refer to protective measures listed in sections 7 and 8. Avoid dust formation.

6.2 Environmental precautions:

Environmental precautions: Do not flush into surface water or sanitary sewer system.
If the product contaminates rivers and lakes or drains inform respective authorities.

6.3 Methods and materials for containment and cleaning up:

Methods for cleaning up: Contain spillage, pick up with an electrically protected vacuum cleaner or by wet-brushing and transfer to a container for disposal according to local regulations (see section 13). Do not create a powder cloud by using a brush or compressed air. Clean contaminated surface thoroughly. Clean with detergents. Avoid solvents. Retain and dispose of contaminated wash water.

6.4 Reference to other sections

For disposal considerations see section 13., Refer to protective measures listed in sections 7 and 8.

SECTION 7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Advice on safe handling: This material is capable of forming flammable dust clouds in air, which, if ignited, can produce a dust cloud explosion. Flames, hot surfaces, mechanical sparks and electrostatic discharges can serve as ignition sources for this material. Electrical equipment should be compatible with the flammability characteristics of this material. The flammability characteristics will be made worse if the material contains traces of flammable solvents or is handled in the presence of flammable solvents. Avoid contact with skin and eyes. When using do not eat, drink or smoke. For personal protection see section 8.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers: Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children. Keep away from food, drink and animal feedingstuffs.
Further information on storage stability: Physically and chemically stable for at least 2 years when stored in the original unopened sales container at ambient temperatures.

7.3 Specific end uses

Specific use(s): For proper and safe use of this product, please refer to the approval conditions laid down on the product label.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
cyantraniliprole	736994-63-1	TWA	5 mg/m^3	SYNGENTA
silica	61790-53-2	TWA (Respirable dust)	1.2 mg/m^3	GB EH40
Further information	For the purposes of these limits, respirable dust and inhalable dust are those fractions of airborne dust which will be collected when sampling is undertaken in accordance with the methods described in MDHS14/3 General methods for sampling and gravimetric analysis of respirable and inhalable dust, The COSHH definition of a substance hazardous to health includes dust of any kind when present at a concentration in air equal to or greater than 10 mg.m-3 8-hour TWA of inhalable dust or 4 mg.m-3 8-hour TWA of respirable dust. This means that any dust will be subject to COSHH if people are exposed above these levels. Some dusts have been assigned specific WELs and exposure to these must comply with the appropriate limit., Most industrial dusts contain particles of a wide range of sizes. The behaviour, deposition and fate of any particular particle after entry into the human respiratory system and the body response that it elicits, depend on the nature and size of the particle. HSE distinguishes two size fractions for limit-setting purposes termed ‘inhalable’ and ‘respirable’., Inhalable dust approximates to the fraction of airborne material that enters the nose and mouth during breathing and is therefore available for deposition in the respiratory tract. Respirable dust approximates to the fraction that penetrates to the gas exchange region of the lung. Fuller definitions and explanatory material are given in MDHS14/3., Where dusts contain components that have their own assigned WEL, all the relevant limits should be complied with., Where no specific short-term exposure limit is listed, a figure three times the long-term exposure should be used			

8.2 Exposure controls

Engineering Measures: Containment and/or segregation is the most reliable technical protection measure if exposure cannot be eliminated. The extent of these protection measures depends on the actual risks in use. Maintain air concentrations below occupational exposure standards. Where necessary, seek additional occupational hygiene advice.

Personal protective equipment

Eye protection: No special protective equipment required.

Hand protection
Remarks: No special protective equipment required.
Skin and body protection: No special protective equipment required. Select skin and body protection based on the physical job requirements.
Respiratory protection: No personal respiratory protective equipment normally required. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.
Protective measures: The use of technical measures should always have priority over the use of personal protective equipment. When selecting personal protective equipment, seek appropriate professional advice.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	**:**	Granules
Colour	**:**	Beige to brown
Odour	**:**	Odourless
Odour Threshold	**:**	No data available
pH	**:**	8-11 Concentration: 1 %
Melting point/range	**:**	No data available
Boiling point/boiling range	**:**	No data available
Flash point	**:**	No data available
Evaporation rate	**:**	No data available
Flammability (solid, gas)	**:**	May form combustible dust concentrations in air.
Burning number	**:**	4 (20 °C) 4 (100 °C)
Upper explosion limit / Upper flammability limit	**:**	No data available
Lower explosion limit / Lower flammability limit	**:**	No data available
Vapour pressure	**:**	No data available
Relative vapour density	**:**	No data available
Density	:	1 g/cm^3
Bulk density	**:**	0.3 - 0.5 g/ml
Solubility(ies)		
Solubility in other solvents	**:**	No data available

Partition Coefficient n-octanol/water	**:**	No data available
Autoignition temperature	**:**	238 °C
Decomposition temperature	**:**	No data available
Viscosity		
Viscosity, dynamic	**:**	No data available
Explosive properties	**:**	Not explosive
Oxidizing properties	**:**	The substance or mixture is not classified as oxidizing.

9.2 Other Information

Minimum ignition temperature	**:**	675 °C
Minimum ignition energy	**:**	> 1,000 mJ

SECTION 10. STABILITY AND REACTIVITY

10.1 Reactivity

None reasonably foreseeable.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

Hazardous reactions: No dangerous reaction known under conditions of normal use.

10.4 Conditions to avoid

Conditions to avoid: No decomposition if used as directed.

10.5 Incompatible materials

Materials to avoid: None known.

10.6 Hazardous decomposition products

Hazardous decomposition products: No hazardous decomposition products are known.

SECTION 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Information on likely routes of exposure: Ingestion, Inhalation, Skin contact, Eye contact

Acute toxicity

Product:

Acute oral toxicity:	LD50 (Rat, female): > 5,000 mg/kg
Acute inhalation toxicity:	LC50 (Rat, male and female): > 5.04 mg/l Exposure time: 4 h

	Test atmosphere: dust/mist
	Assessment: The substance or mixture has no acute inhalation toxicity
Acute dermal toxicity:	LD50 (Rat, male and female): > 5,000 mg/kg
	Assessment: The substance or mixture has no acute dermal toxicity

Components:

cyantraniliprole:

Acute oral toxicity:	LD50 (Rat): > 5,000 mg/kg
Acute inhalation toxicity:	LC50 (Rat): > 5.24 mg/l
	Exposure time: 4 h
	Test atmosphere: dust/mist
Acute dermal toxicity:	LD50 (Rat): > 5,000 mg/kg

Skin corrosion/irritation

Product:

Species: Rabbit
Result: No skin irritation

Components:

cyantraniliprole:

Species: Rabbit
Result: No skin irritation

Serious eye damage/eye irritation

Product:

Species: Rabbit
Result: No eye irritation

Components:

cyantraniliprole:

Species: Rabbit
Result: No eye irritation

Respiratory or skin sensitisation

Product:

Test Type: Buehler Test
Species: Guinea pig
Result: Did not cause sensitisation on laboratory animals.

Components:
cyantraniliprole:
Test Type: mouse lymphoma cells
Species: Mouse
Result: Did not cause sensitisation on laboratory animals.

Germ cell mutagenicity
Components:
cyantraniliprole:
Germ cell mutagenicity- Assessment: Animal testing did not show any mutagenic effects.

Carcinogenicity
Components:
cyantraniliprole:
Carcinogenicity - Assessment: No evidence of carcinogenicity in animal studies.

Reproductive toxicity
Components:
cyantraniliprole:
Reproductive toxicity - Assessment: No toxicity to reproduction

Repeated dose toxicity
Components:
cyantraniliprole:
Remarks: The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

SECTION 12. ECOLOGICAL INFORMATION

12.1 Toxicity

Product:

Toxicity to fish:	LC50 (*Oncorhynchus mykiss* (rainbow trout)): > 100 mg/l Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates:	EC50 (*Daphnia magna* (Water flea)): 0.027 mg/l Exposure time: 48 h
Toxicity to algae:	ErC50 (*Pseudokirchneriella subcapitata* (green algae)): > 100 mg/l Exposure time: 72 h

Ecotoxicology Assessment

Chronic aquatic toxicity:	Very toxic to aquatic life with long lasting effects., Classification of the product is based on the summation of the concentrations of classified components.

Components:

cyantraniliprole:

Toxicity to fish:	LC50 (*Oncorhynchus mykiss* (rainbow trout)): > 12.6 mg/l Exposure time: 96 h LC50 (*Cyprinodon variegatus* (sheepshead minnow)): > 12 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:	ErC50 (*Pseudokirchneriella subcapitata* (green algae)): > 13 mg/l Exposure time: 72 h
M-Factor (Acute aquatic toxicity):	10
Toxicity to fish (Chronic toxicity):	NOEC: 2.9 mg/l Exposure time: 28 d Species: *Cyprinodon variegatus* (sheepshead minnow) NOEC: 10.7 mg/l Exposure time: 28 d Species: *Oncorhynchus mykiss* (rainbow trout)
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity):	NOEC: 0.00656 mg/l Exposure time: 21 d Species: *Daphnia magna* (Water flea)
M-Factor (Chronic aquatic toxicity):	10

12.2 Persistence and degradability

Components:

cyantraniliprole:

Biodegradability: Result: Not readily biodegradable.

12.3 Bioaccumulative potential

Components:

cyantraniliprole:

Bioaccumulation: Bioconcentration factor (BCF): < 1

Remarks: Does not bioaccumulate.

12.4 Mobility in soil

Components:

cyantraniliprole:

Distribution among environmental compartments: Remarks: immobile

Stability in soil: Remarks: No data available

12.5 Results of PBT and vPvB assessment

Product

Assessment: This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Components:

cyantraniliprole:

Assessment:This substance is not considered to be persistent, bioaccumu-lating and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulating (vPvB).

12.6 Other adverse effects

No data available

SECTION 13. DISPOSAL CONSIDERATIONS

Product: Do not contaminate ponds, waterways or ditches with chemical or used container. Do not dispose of waste into sewer. Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of in compliance with local regulations.

Contaminated packaging: Empty remaining contents. Triple rinse containers. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers.

Waste Code: uncleaned packagings

150110, packaging containing residues of or contaminated by dangerous substances.

SECTION 14. TRANSPORT INFORMATION

14.1 UN number

ADN: UN 3077
ADR: UN 3077
RID: UN 3077
IMDG: UN 3077
IATA: UN 3077

14.2 UN proper shipping name

ADN: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (CYANTRANILIPROLE)
ADR: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (CYANTRANILIPROLE)
RID: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (CYANTRANILIPROLE)
IMDG: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (CYANTRANILIPROLE)
IATA: Environmentally hazardous substance, solid, n.o.s. (CYANTRANILIPROLE)

14.3 Transport hazard class(es)

ADN: 9
ADR: 9
RID: 9
IMDG: 9
IATA: 9

14.4 Packing group

ADN

Packing group: III
Classification Code: M7
Hazard Identification Number: 90
Labels: 9

ADR

Packing group: III
Classification Code: M7
Hazard Identification Number: 90
Labels: 9
Tunnel restriction code: (-)

RID
Packing group: III
Classification Code: M7
Hazard Identification Number: 90
Labels: 9
IMDG
Packing group: III
Labels: 9
EmS Code: F-A, S-F
IATA (Cargo)
Packing instruction (cargo aircraft): 956
Packing instruction (LQ): Y956
Packing group: III
Labels: Miscellaneous
IATA (Passenger)
Packing instruction (passenger aircraft): 956
Packing instruction (LQ): Y956
Packing group: III
Labels: Miscellaneous

14.5 Environmental hazards
ADN
Environmentally hazardous: yes
ADR
Environmentally hazardous: yes
RID
Environmentally hazardous: yes
IMDG
Marine pollutant: yes
IATA (Passenger)
Marine pollutant: yes
IATA (Cargo)
Marine pollutant: yes

14.6 Special precautions for user
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.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code
Not applicable for product as supplied.

SECTION 15. REGULATORY INFORMATION

15.1 Safety, health and environmental regulation/legislation specific for the substance or mixture
Regulation (EC) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals: Not applicable
REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59).: Not applicable
Regulation (EC) No 1005/2009 on substances that deplete the ozone layer: Not applicable
Regulation (EC) No 850/2004 on persistent organic pollutants: Not applicable
Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

		Quantity 1	Quantity 2
E1	ENVIRONMENTAL HAZARDS	100 t	200 t

Other regulations:
Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.
Use plant protection products safely. Always read the label and product information before use.

15.2 Chemical Safety Assessment
A Chemical Safety Assessment is not required for this substance when it is used in the specified applications.

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16. OTHER INFORMATION

Full text of H-Statements
H400: Very toxic to aquatic life.
H410: Very toxic to aquatic life with long lasting effects.
Full text of other abbreviations
Aquatic Acute: Acute aquatic toxicity
Aquatic Chronic: Chronic aquatic toxicity
GB EH40: UK. EH40 WEL - Workplace Exposure Limits
GB EH40 / TWA: Long-term exposure limit (8-hour TWA reference period)

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regula-tion; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Cana-da); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; 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; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; 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; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; 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; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

Further information

Classification of the mixture:		**Classification procedure:**
Aquatic Acute 1	H400	Based on product data or assessment
Aquatic Chronic 1	H410	Calculation method

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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

MINECTO™ One

A water dispersible granule formulation containing 400 g/kg cyantraniliprole.

Warning

Very toxic to aquatic life with long lasting effects.

Avoid release to the environment.

Collect spillage.

Dispose of contents/container to a licensed hazardous-waste disposal contractor or collection site except for empty triple rinsed clean containers which can be disposed of as non-hazardous waste.

To avoid risks to human health and the environment, comply with the instructions for use.

MAPP 18649

IMPORTANT INFORMATION - FOR USE ONLY AS A PROFESSIONAL INSECTICIDE

Crops	Maximum individual dose (g product/ha)	Maximum total dose (g product/ ha/crop).	Latest time of application	Aquatic buffer zone distance (metres)
Broccoli/calabrese, Brussels sprout, cabbage, cauliflower, swede, turnip	185	370	3 days before harvest	5
Bulb onions, garlic, shallots, salad onion	310	310	14 days before harvest	5
Lettuce (outdoor)	185	370	7 days before harvest	5
Carrot, parsnip, salsify, parsley root, horseradish, celeriac	185	370	7 days before harvest	5
Edible podded pea, Vining pea	185	370	3 days before harvest	5

Other specific restrictions:

The following minimum intervals between applications must be observed:

7 days for Brussels sprout, cabbage, cauliflower, broccoli, calabrese, swede, turnip, edible podded peas, vining peas and outdoor lettuce.

When used on crops with a greater than 5m aquatic buffer zone, this product must not be applied via hand-held equipment. The maximum total dose of MINECTO ONE per crop must not be exceeded in any calendar year. Any land treated with MINECTO ONE at the maximum total dose must not be treated with any other cyantraniliprole containing products in the same calendar year, including either foliar applications in the growing crop or drench treatments to transplants applied pre-planting.

READ THE LABEL BEFORE USE. USING THIS PRODUCT IN A MANNER THAT IS INCONSISTENT WITH THE LABEL MAY BE AN OFFENCE. FOLLOW THE CODE OF PRACTICE FOR USING PLANT PROTECTION PRODUCTS.

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