

**Before using this product
read and understand the entire label.**

**TO CAUSE A HAZARD IN THE USE, STORAGE
OR DISPOSAL OF THIS SUBSTANCE IS AN OFFENCE.**

WG Formulation: Water Dispersible Granule

**PLESIVA® STAR 60 WG is an Insecticide for the
control of aphids in Tobacco lands.**

Composition (mass/mass)
cyantraniliprole.....100 g/kg
pymetrozine.....500 g/kg
Inert ingredients.....up to 1 kg

Chemical groups:
cyantraniliprole:.....anthranilamide (Group28)
pymetrozine:..... pyridine azomethine (Group 9B)

TRB Certificate No.:

Registered by: Syngenta Agro AG
32 Sandringham Drive, Alexandra Park, Harare.
Tel.: 08677005432 / 08677005434

Emergency Call Number: Swiss Toxicological
Information Centre (24 h) +41 44 251 51 51

Shelf-Life: 2 years from date of manufacture if kept
in the original unopened container under constant
cool and dry conditions.

Manufacturer: Syngenta Crop Protection AG
Basle, Switzerland

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Company

Distributed by:
Date of manufacture:/Batch No.: Please refer to
inkjet print.

PRECAUTIONS

- Handle with care; avoid splashing / contact; poisonous by swallowing, inhalation and contact with the skin.
- KEEP OUT OF REACH OF CHILDREN.
- KEEP APART FROM FOOD, FOODSTUFFS, seeds and fertilizers.
- Store in original container in a cool, dry place and KEEP UNDER LOCK AND KEY.
- Use only on the crops for which the product is registered.
- Avoid drift onto adjacent crops or soil..
- Wear suitable protective clothing, i.e. for mixing – gloves and overalls, eye/face protection and solid footwear; for application - overalls, hat, and solid footwear.
- Do not eat, drink or smoke while handling this product.
- DANGEROUS TO LIVESTOCK, PETS, FISH, BIRDS.
- DO NOT CONTAMINATE DRINKING POOLS, DAMS, RIVERS, WATER-WAYS AND OTHER WATER SUPPLIES.
- Decontamination of Sprayer – after use, clean the sprayer thoroughly and ensure that all traces of PLESIVA® STAR 60 WG are removed. Make use of the following method: (a) Drain tank and then rinse tank, sprayer boom and hoses with clean water for at least 10 minutes. (b) Fill tank with clean water and add to it 1.0 litre household bleach (Sodium hypochlorite 5%) or 1.5 litres household bleach (Sodium hypochlorite 3.5%) per 200 litres of water. Rinse hoses and sprayer boom and leave in the tank for 15 minutes whilst agitating. Drain through the nozzle outlets. (c) Repeat step (b) and thereafter, rinse thoroughly with clean water and dispose of the wash water at a site designated for the disposal of pesticides.
- Empty container disposal – rinse the container 3 times with a volume of water equal to at least 10% of that of the container. And the rinsate to the contents of the spray tank. Destroy the empty container by perforation and flattening. Place it in a secure disposal area and offer it for recycling. DO NOT use it for any other purpose.

L03 Zimb/02Y

 **Plesiva™ Star**
60WG

syngenta®

Reg. No.:
20-D-163-4-D-220-3

Net Content:
500 grams



Composition (mass/mass)
cyantraniliprole.....100 g/kg
pymetrozine.....500 g/kg
Inert ingredients.....up to 1 kg

Chemical groups:
cyantraniliprole:.....anthranilamide (Group28)
pymetrozine:..... pyridine azomethine (Group 9B)

Product names marked ® or ™, the ALLIANCE FRAME
the SYNGENTA Logo and the PURPOSE ICON
are Trademarks of a Syngenta Group Company

WARNING



SYMPTOMS OF POISONING

No specific symptoms are known but may include nausea, vomiting, dizziness and headache. Diarrhoea may also occur.

FIRST AID

General advice: If you begin to feel unwell, call a doctor, Syngenta emergency number or poison control center and apply first aid measures as described below. Have the product container, label or Safety Data Sheet with you when calling or when going for treatment.

Eye contact: Immediately rinse with a gentle stream of water, also under the eyelids, for at least 15 minutes. Remove contact lenses. Immediate medical attention is required.

Skin contact: Immediately remove contaminated clothing; wash affected skin with plenty of water. Wash contaminated clothing before re-use. If skin irritation persists, call a doctor.

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 doctor or poison control center immediately.

If swallowed: Seek medical advice immediately and show this container or label. DO NOT induce vomiting. Note: Never give anything by mouth to an unconscious patient.

NOTE TO PHYSICIAN

No specific antidote is known. Apply symptomatic therapy.

RE-ENTRY INTERVAL

Do not enter treated area until the spray has dried. If earlier entry is required, then wear a long sleeved shirt, trousers and impermeable footwear, and impermeable gloves.

USER'S RISK

The user bears the risk for damage resulting from factors beyond the manufacturer's control. All recommendations for use of the insecticide are

based on the current state of the manufacturer's knowledge. Since the manufacturer cannot control the farmer's choice of insecticide, its application, use, or storage of the product, or other agronomic practices, the manufacturer cannot accept responsibility therefore.

Resistant strains of insects may develop or may exist against which insecticides may be less effective. Since the occurrence of such strains cannot be forecast, neither the manufacturer nor its distributors can assume responsibility for any loss or damage caused by failure to control resistant insects.

PRODUCT INFORMATION

Mode of Action

PLESIVA® STAR 60 WG is an insecticide that contains the two active ingredients cyantraniliprolle (IRAC Group 28) and pymetrozine (IRAC Group 9B). It shows quick translaminar movement into the plant and strong upward systemic movement through the xylem system. Insects are controlled by the product through contact and ingestion. Due to the content of two active ingredients with different modes of action, it shows immediate stoppage of insect feeding with long residual activity and controls resistant strains of sucking and chewing insects.

Spectrum of Activity

PLESIVA STAR ® 60WG is effective against sucking and chewing insect pests and controls aphids in tobacco.

Resistance Management:

Because insect resistance development cannot be predicted, the use of this product should conform to sound resistance management strategies established for the crop and use area. Syngenta encourages responsible product stewardship to ensure effective long-term control of the insects on this label.

Use of PLESIVA® STAR 60 WG or any other IRAC Group 28 or Group 9B insecticides must be applied using a "treatment window" approach to avoid exposure of successive insect pest generations to the same mode of action.

A "treatment window" is defined as the period of residual activity provided by single or sequential applications of products with the same mode of action. This "treatment window" should not exceed approximately the length of one generation of the target pest and the period insect pests are controlled with IRAC Group 28 insecticides should not exceed 50% of the total number of insecticide applications.

In case a follow-up foliar spray is needed after drench application of PLESIVA STAR, choose a product that is from a different group from IRAC Group 28 and IRAC Group 9B (Pyridine azomethine)

Avoid using less than the rate stated on the label when used alone or in tank-mixtures.

Target the most susceptible insect life stages whenever possible.

DIRECTIONS FOR USE

Pre harvest interval

Minimum number of days between soil drenching and harvesting:
Tobacco.....49 days.

Dosage rates

Crop	Pest	Dosage	Remarks
Tobacco Lands TRB Certificate No.:	Green Peach Aphid (<i>Myzus persicae</i>)	60 grams / 100 litres water, or 270 grams / ha of 15'000 plants	1 x Soil Drench application

Compatibility

PLESIVA® STAR 60 WG has been shown to be compatible with many commonly used pesticides and fertilizers that are also applied to the soil. However, since it is not possible to test a large number of possible mixtures, the user should pre-test any proposed mixture with this product to check physical compatibility and lack of phytotoxic effects.

Mixing

Half-fill the tank with clean water. Add the recommended quantity of PLESIVA® STAR 60 WG to the water while agitating. Top up tank with the required volume of water. Always stir the spray mixture well and use within a few hours. Do not prepare more spray mixture than is needed for the immediate operation.

Application

Tobacco Lands – soil drench application: Mix 60 grams PLESIVA® STAR 60 WG with 100 litres of water. Pour 30 ml of this mixture into the planting hole soon after the recommended planting water has been poured into the hole and before it disappears into the soil. Follow up with the placement of the seedling, transplanting and covering with dry soil.

PLESIVA STAR 60WG

Version 4.0 Revision Date: 10.08.2017 SDS Number: S00037181445 This version replaces all previous versions.

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name : PLESIVA STAR 60WG :

Design code A16890B

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 Crop Protection AG
Postfach
CH-4002 Basel
Switzerland

Telephone : +41 61 323 11 11

Telefax : +41 61 323 12 12

E-mail address of person responsible for the SDS : sds.ch@syngenta.com

1.4 Emergency telephone number

Emergency telephone number : +44 1484 538444

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (**REGULATION (EC) No 1272/2008**)

Carcinogenicity, Category 2

H351: Suspected of causing cancer.

Acute aquatic toxicity, Category 1

H400: Very toxic to aquatic life.

Chronic aquatic toxicity, Category 1

H410: Very toxic to aquatic life with long lasting effects.

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2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :



Signal word : Warning

Hazard statements : H351 Suspected of causing cancer.
H410 Very toxic to aquatic life with long lasting effects.

Supplemental Hazard Statements : EUH401 To avoid risks to human health and the environment, comply with the instructions for use.

Precautionary statements : **Prevention:**
P201 Obtain special instructions before use.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
Response:
P308 + P313 IF exposed or concerned: Get medical advice/ attention.
P391 Collect spillage.
Disposal:
P501 Dispose of contents/ container to an approved waste disposal plant.

Hazardous components which must be listed on the label:
pymetrozine (ISO)

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)
pymetrozine (ISO)	123312-89-0 613-202-00-4	Carc. 2; H351 Aquatic Chronic 3; H412	>= 50 - < 70
cyantraniliprole	736994-63-1	Aquatic Acute 1; H400 Aquatic Chronic 1; H410	>= 10 - < 20

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sodium dibutyl-naphthalenesulphonate	25417-20-3 246-960-6	Acute Tox. 4; H302 Acute Tox. 4; H332 Skin Irrit. 2; H315 Eye Irrit. 2; H319 Aquatic Chronic 3; H412	>= 1 - < 2.5
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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 Safety Data Sheet with you when calling the emergency number, a poison control center 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 : 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: Firefighting 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

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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 firefighting : 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 firefighters

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 material 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

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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.

This material can become readily charged in most operations.

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.

7.3 Specific end use(s)

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
pymetrozine (ISO)	123312-89-0	TWA	0.8 mg/m ³	Syngenta
cyantraniliprole	736994-63-1	TWA	5 mg/m ³	Syngenta
silica	61790-53-2	TWA (inhalable dust)	4 mg/m ³	CH SUVA
Further information	Harm to the unborn child is not to be expected when the OEL-value is respected			

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.

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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 : No data available
- Odour Threshold : No data available
- pH : 7 - 11
Concentration: 1 % w/v
- 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 : 3 (20 °C)
5 (100 °C)
- Upper explosion limit / Upper flammability limit : No data available
-

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Lower explosion limit / Lower flammability limit : No data available

Relative vapour density : No data available

Solubility(ies)
Solubility in other solvents : No data available

Partition coefficient: n-octanol/water : No data available

Auto-ignition temperature : > 400 °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 energy : 300 - 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

Combustion or thermal decomposition will evolve toxic and irritant vapours.

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SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product:

Acute oral toxicity

: LD50 (Rat, female): > 5,000 mg/kg

Acute inhalation toxicity

: LC50 (Rat, male and female): > 5.03 mg/l
Test atmosphere: dust/mist

Acute toxicity estimate: > 5 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: Calculation method

Acute dermal toxicity

: LD50 (Rat, male and female): > 5,000 mg/kg

Components:

pymetrozine (ISO):

Acute oral toxicity

: LD50 (Rat, male and female): 5,820 mg/kg

Acute inhalation toxicity

: LC50 (Rat, male and female): > 1.8 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): > 2,000 mg/kg
Assessment: The substance or mixture has no acute dermal toxicity

cyantraniliprole:

Acute oral toxicity

: LD50 (Rat, female): > 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, female): > 5,000 mg/kg

sodium dibutylnaphthalenesulphonate:

Acute oral toxicity

: Assessment: The component/mixture is moderately toxic after single ingestion.

Acute inhalation toxicity

: Assessment: The component/mixture is moderately toxic after short term inhalation.

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Skin corrosion/irritation

Product:

Species: Rabbit
Result: No skin irritation

Components:

pymetrozine (ISO):

Species: Rabbit
Result: No skin irritation

cyantraniliprole:

Species: Rabbit
Result: No skin irritation

Serious eye damage/eye irritation

Product:

Species: Rabbit
Result: No eye irritation

Components:

pymetrozine (ISO):

Species: Rabbit
Result: No eye irritation

cyantraniliprole:

Species: Rabbit
Result: No eye irritation

sodium dibutyl-naphthalenesulphonate:

Result: Eye irritation

Respiratory or skin sensitisation

Product:

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

Components:

pymetrozine (ISO):

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

cyantraniliprole:

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

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Germ cell mutagenicity

Components:

pymetrozine (ISO):

Germ cell mutagenicity-
Assessment : Did not show mutagenic or teratogenic effects in animal experiments.

cyantraniliprole:

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

Carcinogenicity

Components:

pymetrozine (ISO):

Carcinogenicity -
Assessment : Increased levels of liver tumours were observed at high doses in rats and mice. The relevance of these findings to humans is questionable.
,Limited evidence of carcinogenicity in animal studies

cyantraniliprole:

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

Reproductive toxicity

Components:

pymetrozine (ISO):

Reproductive toxicity -
Assessment : No toxicity to reproduction

cyantraniliprole:

Reproductive toxicity -
Assessment : No toxicity to reproduction

Repeated dose toxicity

Product:

Remarks: No information available.

Components:

cyantraniliprole:

Remarks: The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

SECTION 12: Ecological information

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10.08.2017

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This version replaces all previous versions.

12.1 Toxicity

Product:

- Toxicity to fish : LC50 (Cyprinus carpio (Carp)): > 100 mg/l
Exposure time: 96 h
- Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 0.18 mg/l
Exposure time: 48 h
- Toxicity to algae : ErC50 (Pseudokirchneriella subcapitata (green algae)): > 100 mg/l
Exposure time: 72 h

Components:

pymetrozine (ISO):

- 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)): 87 mg/l
Exposure time: 48 h
- Toxicity to algae : EC50 (Pseudokirchneriella subcapitata (green algae)): 16.9 mg/l
Exposure time: 96 h
- NOEC (Pseudokirchneriella subcapitata (green algae)): 6.28 mg/l
Exposure time: 96 h
- Toxicity to microorganisms : EC50 (activated sludge): > 100 mg/l
Exposure time: 3 h
- Toxicity to fish (Chronic toxicity) : NOEC: 11.7 mg/l
Exposure time: 90 d
Species: Oncorhynchus mykiss (rainbow trout)
Test Type: Early-life Stage
- Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC: 0.025 mg/l
Exposure time: 21 d
Species: Daphnia magna (Water flea)
- M-Factor (Chronic aquatic toxicity) : 1

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

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- 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

sodium dibutyl-naphthalenesulphonate:

Ecotoxicology Assessment

- Chronic aquatic toxicity : Harmful to aquatic life with long lasting effects.

12.2 Persistence and degradability

Components:

pymetrozine (ISO):

- Biodegradability : Result: Not readily biodegradable.
- Stability in water : Degradation half life: 4.8 - 6.3 d
Remarks: Product is not persistent.

cyantraniliprole:

- Biodegradability : Result: Not readily biodegradable.
- Stability in water : Remarks: No data available

12.3 Bioaccumulative potential

Components:

pymetrozine (ISO):

- Bioaccumulation : Remarks: Low bioaccumulation potential.

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Partition coefficient: n-octanol/water : log Pow: -0.18 (25 °C)

cyantraniliprole:

Bioaccumulation : Bioconcentration factor (BCF): < 1
Remarks: Does not bioaccumulate.

12.4 Mobility in soil

Components:

pymetrozine (ISO):

Distribution among environmental compartments : Remarks: Slightly mobile in soils

Stability in soil : Dissipation time: 7.9 - 30 d
Percentage dissipation: 50 % (DT50)
Remarks: Product is not persistent.

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:

pymetrozine (ISO):

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

cyantraniliprole:

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

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12.6 Other adverse effects

No data available

SECTION 13: Disposal considerations

13.1 Waste treatment methods

- 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.
-

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
-

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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

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Marine pollutant : yes

IATA (Passenger)

Marine pollutant : yes

IATA (Cargo)

Marine pollutant : yes

14.6 Special precautions for user

Not applicable

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 regulations/legislation specific for the substance or mixture

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59).

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

Regulation (EC) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals : 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.

Take note of Directive 92/85/EEC regarding maternity protection or stricter national regulations, where applicable.

Article 13 Maternity ordinance (SR 822.111.52): Expectant and nursing mothers are only permitted to come into contact with this product during the course of their work if, based on a risk assessment carried out in accordance with Article 63 of Ordinance 1 on the Employment Act (ArGV 1) (SR 822.111), the chemicals in question have been found not to cause any specific harm to mothers or children or if such harm can be ruled out by taking appropriate protective measures.

Take note of Directive 94/33/EC on the protection of young people at work or stricter national regulations, where applicable.

Article 4 para. 4 of the Ordinance on the protection of young people in the workplace (SR 822.115) and Article 1 lit. f of the EAER regulation on hazardous work and young people (SR 822.115.2): Young people undergoing basic vocational training may only work with this product

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if the relevant training ordinance makes provision for them to do so with a view to enabling them to achieve their training objectives and if the preconditions for the training plan have been met and the applicable age restrictions have been complied with. Young people who are not completing any basic vocational training are not permitted to work with this product. Employees of either sex who are under 18 years old are classed as young people.

15.2 Chemical safety assessment

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

SECTION 16: Other information

Full text of H-Statements

H302	: Harmful if swallowed.
H315	: Causes skin irritation.
H319	: Causes serious eye irritation.
H332	: Harmful if inhaled.
H351	: Suspected of causing cancer.
H400	: Very toxic to aquatic life.
H410	: Very toxic to aquatic life with long lasting effects.
H412	: Harmful to aquatic life with long lasting effects.

Full text of other abbreviations

Acute Tox.	: Acute toxicity
Aquatic Acute	: Acute aquatic toxicity
Aquatic Chronic	: Chronic aquatic toxicity
Carc.	: Carcinogenicity
Eye Irrit.	: Eye irritation
Skin Irrit.	: Skin irritation
CH SUVA	: Switzerland. Limit values at the work place
CH SUVA / TWA	: Time Weighted Average

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 Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); 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

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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:

Carc. 2	H351
Aquatic Acute 1	H400
Aquatic Chronic 1	H410

Classification procedure:

Calculation method
Based on product data or assessment
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.

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