



Nemathorin[®] 10G

syngenta.

GROUP 1 INSECTICIDE

Product registration number: MAPP 11003
UFI: 7C0R-2YGX-WW89-SW3W

Fine granule containing 10% w/w fosthiazate.

A contact nematocide/insecticide for the control of the potato cyst nematode (*Globodera rostochiensis* and *Globodera pallida*) and a reduction of potato tuber damage caused by wireworm and reduction of spraing transmitted by free-living nematodes.

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

Colour of the bottom of the container will change every calendar year to track the manufacturing date of the empty container. There is no link with the manufacturing date of the product Nemathorin 10G inside the container.

PROTECT FROM FROST.

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

© Syngenta AG, 2022

® NEMATHORIN is a Registered Trademark of ISHIHARA SANGYO KAISHA, LTD.

Approval holder:

ISK Biosciences Europe NV
Pegasus Park, De Kleetlaan 12B
1831 Diegem
Belgium

UK Marketing Company:

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



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

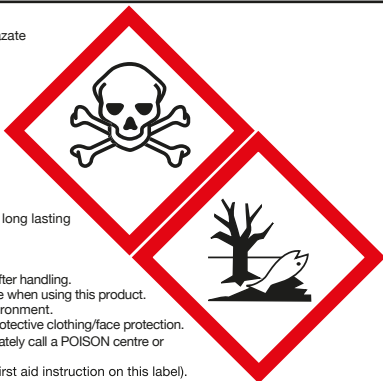
20 kg

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

NEMATHORIN 10G

Fine granule containing 10% w/w fosthiazate

UFI: 7C0R-2YGX-WW89-SW3W

Signal Word Danger**Hazard****Statements** Toxic if swallowed.
Toxic to aquatic life with long lasting effects.**Precautions****Statements** Avoid breathing dust.
Wash hands thoroughly after handling.
Do not eat, drink or smoke when using this product.
Avoid release to the environment.
Wear protective gloves/protective clothing/face protection.
IF SWALLOWED: Immediately call a POISON centre or doctor/physician.
Specific treatment (see first aid instruction on this label).
Rinse mouth.
Wash contaminated clothes before re-use.
Store locked up.**Supplemental****Information** Toxic by eye contact.
To avoid risks to human health and the environment comply with the instructions for use.
Contains Fosthiazate (ISO) (98886-44-3). May cause an allergic reaction.**IMPORTANT INFORMATION**

FOR USE ONLY AS AN AGRICULTURAL NEMATICIDE / INSECTICIDE

Crops: Potatoes

Maximum individual dose per crop, Maximum number treatments, Latest time of application and Other specific restrictions: Full details are given in IMPORTANT INFORMATION on attached leaflet.

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.

MAPP 11003

IMPORTANT INFORMATION

FOR USE ONLY AS AN AGRICULTURAL NEMATOCIDE / INSECTICIDE

Crops	Maximum individual dose per crop	Maximum number of treatments	Latest time of application
Potatoes	Broadcast overall application 30 kg product/ha	One per crop	At planting

Other specific restrictions:

DO NOT desiccate or harvest crops for human or animal consumption for at least 17 weeks after application.

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.**SAFETY PRECAUTIONS****(a) Operator protection**

FOSTHIAZATE is an anticholinesterase organophosphorus compound. Do not use if under medical advice NOT to work with such compounds. Engineering control of operator exposure must be used where reasonably practicable in addition to the following personal protective equipment:

WEAR SUITABLE PROTECTIVE CLOTHING (COVERALLS), SUITABLE PROTECTIVE GLOVES, EYE PROTECTION (GOGGLES) AND FILTERING FACE PIECE RESPIRATOR (DISPOSABLE FILTERING FACE PIECE TO AT LEAST EN 149 FFP3) when handling the product, adjusting granule application machinery or handling contaminated surfaces.

WEAR SUITABLE PROTECTIVE CLOTHING (COVERALLS) when applying the product via tractor-mounted/drawn machinery.
WEAR SUITABLE PROTECTIVE CLOTHING (COVERALLS AND RUBBER APRON), SUITABLE PROTECTIVE GLOVES, RUBBER BOOTS, EYE PROTECTION (GOGGLES) AND A FILTERING FACE PIECE RESPIRATOR (DISPOSABLE FILTERING FACE PIECE TO AT LEAST EN 149 FFP3) when cleaning contaminated equipment.

However engineering controls may replace personal protective equipment if a COSHH assessment shows they provide an equal or higher standard of protection.

WASH ALL PROTECTIVE CLOTHING thoroughly after use, especially the insides of the gloves.
TAKE OFF IMMEDIATELY heavily contaminated clothing.
WASH DUST from skin or eyes immediately.
DO NOT BREATHE DUST.
AVOID ALL CONTACT BY MOUTH.
WASH HANDS AND EXPOSED SKIN before eating, drinking or smoking and after work.

SYMPTOMS OF POISONING

The active ingredient fosthiazate inhibits cholinesterase, resulting in stimulation of the nervous system, the parasympathetic nervous system and the somatic motor nerves. The symptoms may include excessive sweating, headache, weakness, faintness and giddiness, nausea, stomach pains, vomiting, small pupils, blurred vision, muscle twitching. First aid measures are aimed at reactivating cholinesterase and eliminating exposure.

FIRST AID TREATMENT

If any of the above symptoms occur, particularly if there is known contamination.

STOP WORK

Remove contaminated clothing. Wash exposed skin and hair. Prevent all exertion. Call doctor AT ONCE and show him this label.

Following an **oral exposure**, seek medical advice immediately and show this container or label. Do NOT induce vomiting. The symptoms are of cholinesterase inhibition. Consider taking venous blood for determination of blood cholinesterase activity (heparin tube).

Following a **dermal exposure**, the skin should be washed with copious amounts of tap water and soap. Contaminated clothing and footwear should be removed. Consult a doctor/medical service.

Following **inhalation exposure**, leave the contaminated area immediately and move to fresh air. Consult a doctor/medical service. Following **ocular exposure**, remove any contact lens at once. Eyes should be immediately irrigated with copious amounts of water for at least 15 minutes. Irrigation should not be delayed for the purpose of obtaining sterile or special irrigating solutions. If pain, swelling or photophobia persists, the individual should submit to an ophthalmologic examination.

GUIDE TO DOCTOR**Initial Measures**

Initial measures would include establishment of a patient airway, removal of secretions, and respiratory resuscitation as needed.

(b) Environmental protection

DANGEROUS TO LIVESTOCK. Keep all livestock out of treated areas for at least 13 weeks following treatment.
To protect birds/wild mammals the product must be fully incorporated in the soil; ensure that the product is also fully incorporated at the end of rows.

To protect birds and wild mammals remove spillages.
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 groundwater do not apply this or any other product containing fosthiazate more than once every four years.
The incorporation of the product into soil to a depth of 10-15 centimetres and ridging-up of treated soil must be carried out immediately after application.

(c) Storage and disposal

KEEP IN ORIGINAL CONTAINER, tightly closed in a safe place.
EMPTY CONTAINER COMPLETELY and dispose of safely.
RETURN EMPTY CONTAINER TO THE SUPPLIER.
DO NOT RE-USE CONTAINER FOR ANY OTHER PURPOSE.
OPEN THE CONTAINER ONLY AS DIRECTED.

This leaflet is part of the approved Product Label.

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.

RESTRICTIONS

NEMATHORIN 10G granules must be evenly applied and incorporated completely in one operation.
DO NOT ALLOW THE GRANULES TO BECOME WET OR DAMP BEFORE APPLICATION.
DO NOT ALLOW THE GRANULES TO STAND OVERNIGHT IN THE APPLICATION HOPPER.
FAILURE TO COMPLETELY BURY GRANULES IMMEDIATELY AFTER APPLICATION IS HAZARDOUS TO WILDLIFE.
DO NOT USE on crops desiccated or harvested less than 17 weeks after treatment with NEMATHORIN 10G.
Consult processor before using on crops being grown for processing.

PESTS CONTROLLED

A contact nematocide/insecticide for the control of the potato cyst nematode (*Globodera rostochiensis* and *Globodera pallida*). Also for the reduction of potato tuber damage caused by wireworms (*Agriotes* spp) plus reduction of spraing resulting from tobacco rattle virus (TRV) transmitted by species of free-living nematodes, (stubby root nematodes) belonging to the genera *Trichodorus* and *Paratrachodorus*.

CROP SPECIFIC INFORMATION**Timing**

At the time of planting

Rates of Use

For control of potato cyst nematodes: 30 kg/ha - broadcast overall and incorporated.
For reduction of spraing symptoms: 30 kg/ha - broadcast overall and incorporated before planting or at the time of tuber planting.
For reduction of wireworm damage: 15 kg/ha - broadcast and incorporated at the time of tuber planting.

APPLICATION

Ensure that the hopper on the application equipment is large enough to accommodate the full container content and that the amount dispensed is not more than is required for the area to be treated.

Operating instructions: This is a 'one shot' container; all contents to be used in one operation. This container should only be used in conjunction with a suitable adapter fitted to the hopper lid.

1. Remove the safety caps from the valve and applicator hopper.
2. Fit the container valve on to the applicator hopper.
3. Rotate the container anti-clockwise to start the flow of product.
4. When emptying is complete, rotate the container clockwise.
5. Remove the container from the applicator hopper.
6. Replace the safety caps on the applicator hopper and valve.
7. Return the empty containers to your supplier for recycling. Do not rinse out container.
8. Empty containers must be handled, transported and stored as if they contain pesticide.

Depth of incorporation is important for optimum efficacy. NEMATHORIN 10G granules should be incorporated to a depth of 10-15 cm. Incorporation to a greater depth than 10-15 cm will reduce efficacy of PCN control.

Application and incorporation is best achieved using equipment such as Horstine Farmery MICROBAND or TMair, Matco or Stocks-Micrometer or TechNeat Maxicast applicators together with a rear-mounted powered rotary cultivator.

Powered rotary cultivators are the preferred implement for incorporation but discs, power, spring tine or Dutch harrows can be used provided that two passes are made at right angles to each other.

Application with Stone Separating Equipment

Where application of NEMATHORIN 10G granules is to be done at the same time as stone separation, the granules should be applied through a Horstine Farmery MICROBAND applicator fitted with fishtail spreaders with a distance of 30 cm between centres fixed to the frame of the stone separator. The fishtail spreaders should be positioned as far forward as possible and ideally to achieve optimum placement and depth of incorporation should be placed above the first roller/web. It may be necessary to adjust the position according to the soil type and conditions. It is important that the applicator is positioned so that the granules are uniformly incorporated to a depth of 10-15 cm. INCORPORATION TO A GREATER DEPTH WILL CAUSE A REDUCTION IN CONTROL.

IMPORTANT

DO NOT ALLOW THE GRANULES TO BECOME WET OR DAMP BEFORE APPLICATION.
DO NOT ALLOW THE GRANULES TO STAND OVERNIGHT IN THE APPLICATION HOPPER.
Ensure that the hopper and rotators are clean and dry before use.
Application equipment should be calibrated prior to use to ensure accurate dosing and incorporation.

APPLICATION EQUIPMENT CLEANING PROCEDURE

Ensure that no or only a minimal quantity of product remains in the hopper after field application. Upon completion, place suitable receptacles over the delivery tubes, crank the applicator and collect the remaining granules. Comply with operator safety measures during these manipulations. The granules collected should be disposed in appropriate chemical waste.

STORAGE

Keep dry and frost proof in a suitable pesticide store between 0 and 32oC.

COMPANY ADVISORY INFORMATION

For the latest further advice and information on optimising product application, consult your **distributor**, a BASIS **qualified agronomist** or contact Syngenta Crop Protection Technical Enquires on 0800 169 6058.

Product registration number: MAPP 11003

Fine granule containing 10% w/w fosthiazate.
A contact nematocide/insecticide for the control of the potato cyst nematode (*Globodera rostochiensis* and *Globodera pallida*) and a reduction of potato tuber damage caused by wireworm and reduction of spraing transmitted by free-living nematodes.

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

© Syngenta AG, 2022

® NEMATHORIN is a Registered Trademark of ISHIHARA SANGYO KAISHA, LTD.

© MICROBAND is a Registered Trademark of Chafer Machinery Limited

Approval holder: ISK Biosciences Europe NV Pegasus Park, De Kleetlaan 12B 1831 Diegem Belgium	UK Marketing Company: Syngenta UK Ltd CPC4, Capital Park, Fulbourn, Cambridge, CB21 5XE Tel: Cambridge (01223) 883400	 This product label is compliant with the CPA Voluntary Initiative (VI) guidance.
---	---	--

**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)
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 'Extension 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.

SAFETY DATA SHEET - V10**SECTION 1. IDENTIFICATION OF THE SUBSTANCE/ MIXTURE AND OF THE COMPANY/UNDERTAKING****1.1 Product identifier**

Trade name: NEMATHORIN 10 G
Design code: A12842A
Product Registration Number: MAPP 11003

1.2 Relevant identified uses of the substance or mixture and uses advised against

Use of the Substance/Mixture: Nematicide

1.3 Details of the supplier of the safety data sheet

Company: Syngenta UK Ltd
CPC4, Capital Park, Fulbourn, Cambridge, CB21 5XE
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 telephone number +44 (0) 1484 538444

SECTION 2. HAZARDS IDENTIFICATION**2.1 Classification of the substance or mixture****Classification (REGULATION (EC) No 1272/2008)**

Acute toxicity, Category 3 - H301: Toxic if swallowed.
Long-term (chronic) aquatic hazard, Category 2 - H411: Toxic to aquatic life with long lasting effects.

2.2 Label elements**Labelling: Regulation (EC) No. 1272/2008**

Hazard pictograms	
Signal Word	Danger
Hazard Statements	H301 Toxic if swallowed. H411 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.
EUH208 Contains fosthiazate. May produce an allergic reaction.
EUH070 Toxic by eye contact.
Precautionary Statements
P264 Wash skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.

P301+P310+P330 IF SWALLOWED: Immediately call a POISON CENTER/doctor. Rinse mouth.

P391 Collect spillage.

P405 Store locked up.

P501 Dispose of contents/container to an approved waste disposal plant.

Hazardous components which must be listed on the label: fosthiazate (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. This product contains an anticholinesterase compound. Do not use if under medical advice not to work with such compounds. May form combustible dust concentrations in air.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**3.2 Mixtures****Components**

Chemical Name
fosthiazate (ISO)
CAS-No. EC-No. Index-No. Registration number
98886-44-3
015-168-00-0

Classification

Acute Tox. 3; H301

Acute Tox. 3; H331

Acute Tox. 3; H311

Skin Sens. 1; H317

Aquatic Acute 1; H400

Aquatic Chronic 1; H410

M-Factor (Acute aquatic toxicity): 1

M-Factor (Chronic aquatic toxicity): 1

Concentration (% w/w)

>= 10 - < 20

For explanation of abbreviations see section 16.

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

Use 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 Specific hazards arising from the substance or mixture

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.

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.

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-

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**

Contains no substances with occupational exposure limit values.

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 : Tightly fitting safety goggles. Always wear eye protection when the potential for inadvertent eye contact with the product cannot be excluded. Equipment should conform to EN 166

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

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**

Contains no substances with occupational exposure limit values.

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 : Tightly fitting safety goggles. Always wear eye protection when the potential for inadvertent eye contact with the product cannot be excluded. Equipment should conform to EN 166

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:	pellets
Colour:	red brown
Odour:	characteristic
Odour Threshold:	No data available
pH:	8.61

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.

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:	1.13 g/cm ³ (25 °C)
Bulk density:	0.435 kg/dm ³
Solubility(es)	

Solubility in other solvents:	dispersible
Partition coefficient:	Solvent: Water

n-octanol/water:	No data available
Auto-ignition temperature:	No data available
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

No data available

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:

fosthiazate (ISO):

Species: Rabbit
Result: No eye irritation

Acute inhalation toxicity:

Acute toxicity estimate: > 5 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Method: Calculation method

Acute dermal toxicity:

LD50 (Rat): > 2,000 mg/kg

Assessment: The substance or mixture has no acute dermal toxicity

Germ cell mutagenicity

fosthiazate (ISO):

Germ cell mutagenicity- Assessment: Based on

available data, the classification criteria are not met.

Carcinogenicity

Components:

fosthiazate (ISO):

Acute oral toxicity:
LD50 (Rat, female): 57 mg/kg
LD50 (Rat, male): 73 mg/kg
Acute inhalation toxicity:
LC50 (Rat, female): 0.56 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
LC50 (Rat, male): 0.83 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Acute dermal toxicity:
LD50 (Rat, female): 853 mg/kg
LD50 (Rat, male): 2,373 mg/kg

Skin corrosion/irritation
Product:
Result: No skin irritation

Components:
fosthiazate (ISO):
Assessment: The substance or mixture is not classified as specific target organ toxicant, single exposure.

STOT - repeated exposure
Components:
fosthiazate (ISO):
Assessment: The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Acute toxicity:

LD50 (Rat, female): 57 mg/kg

LD50 (Rat, male): 73 mg/kg

Acute inhalation toxicity:

LC50 (Rat, female): 0.56 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

LC50 (Rat, male): 0.83 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Acute dermal toxicity:

LD50 (Rat, female): 853 mg/kg

LD50 (Rat, male): 2,373 mg/kg

Skin corrosion/irritation

Product:

Result: No skin irritation

Components:

fosthiazate (ISO):

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

STOT - single exposure

Components:

fosthiazate (ISO):

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

STOT - repeated exposure

Components:

fosthiazate (ISO):

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

Further information

Components:

fosthiazate (ISO):

Remarks: Toxic by eye contact.

SECTION 12. ECOLOGICAL INFORMATION

12.1 Toxicity

Product:

Toxicity to daphnia and other aquatic invertebrates:
EC50 (Daphnia magna (Water flea)): 4.94 mg/l

Remarks: Low bioaccumulation potential.

12.4 Mobility in soil

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:

fosthiazate (ISO):

Toxicity to fish: LC50 (Oncorhynchus mykiss (rainbow trout)): 114 mg/l

Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates:

EC50 (Daphnia magna (Water flea)): 0.282 mg/l

Exposure time: 48 h

M-Factor (Acute aquatic toxicity): 1

Toxicity to fish (Chronic toxicity): NOEC: 1.65 mg/l

Exposure time: 28 d

Species: Oncorhynchus mykiss (rainbow trout)

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity): NOEC: 0.06 mg/l

Exposure time: 21 d

Species: Daphnia magna (Water flea)

M-Factor (Chronic aquatic toxicity): 1

12.2 Persistence and degradability

Components:

fosthiazate (ISO):

Stability in water: Degradation half life: 22 - 49 d

Remarks: Product is not persistent.

12.3 Bioaccumulative potential

Components:

fosthiazate (ISO):

Bioaccumulation: Species: Lepomis macrochirus (Bluegill sunfish)

Exposure time: 672 h

Bioconcentration factor (BCF): 2.3 - 4.5

Remarks: Low bioaccumulation potential.

Partition coefficient: n-octanol/water: log Pow: 1.752

12.4 Mobility in soil
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:
fosthiazate (ISO):
Assessment : This substance is not considered to be persistent, bioaccumulating and toxic (PBT).

EC50 (Daphnia magna (Water flea)): 0.282 mg/l

Exposure time: 48 h

M-Factor (Acute aquatic toxicity): 1

Toxicity to fish (Chronic toxicity): NOEC: 1.65 mg/l

Exposure time: 28 d

Species: Oncorhynchus mykiss (rainbow trout)

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity): NOEC: 0.06 mg/l

Exposure time: 21 d

Species: Daphnia magna (Water flea)

M-Factor (Chronic aquatic toxicity): 1

12.2 Persistence and degradability

Components:

fosthiazate (ISO):

Stability in water: Degradation half life: 22 - 49 d

Remarks: Product is not persistent.

12.3 Bioaccumulative potential

Components:

fosthiazate (ISO):

Bioaccumulation: Species: Lepomis macrochirus (Bluegill sunfish)

Exposure time: 672 h

Bioconcentration factor (BCF): 2.3 - 4.5

Remarks: Low bioaccumulation potential.

Partition coefficient: n-octanol/water: log Pow: 1.752

12.4 Mobility in soil

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:

fosthiazate (ISO):

Toxicity to fish: LC50 (Oncorhynchus mykiss (rainbow trout)): 114 mg/l

Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates:

EC50 (Daphnia magna (Water flea)): 0.282 mg/l

Exposure time: 48 h

M-Factor (Acute aquatic toxicity): 1

Toxicity to fish (Chronic toxicity): NOEC: 1.65 mg/l

Exposure time: 28 d

Species: Oncorhynchus mykiss (rainbow trout)

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity): NOEC: 0.06 mg/l

Exposure time: 21 d

Species: Daphnia magna (Water flea)

M-Factor (Chronic aquatic toxicity): 1

12.2 Persistence and degradability

Components:

fosthiazate (ISO):

Stability in water: Degradation half life: 22 - 49 d

Remarks: Product is not persistent.

12.3 Bioaccumulative potential

Components:

fosthiazate (ISO):

Bioaccumulation: Species: Lepomis macrochirus (Bluegill sunfish)

Exposure time: 672 h

Bioconcentration factor (BCF): 2.3 - 4.5

Remarks: Low bioaccumulation potential.

Partition coefficient: n-octanol/water: log Pow: 1.752

12.4 Mobility in soil

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:

fosthiazate (ISO):

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

EC50 (Daphnia magna (Water flea)): 0.282 mg/l

Exposure time: 48 h

M-Factor (Acute aquatic toxicity): 1

Toxicity to fish (Chronic toxicity): NOEC: 1.65 mg/l

Exposure time: 28 d

Species: Oncorhynchus mykiss (rainbow trout)

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity): NOEC: 0.06 mg/l

Exposure time: 21 d

Species: Daphnia magna (Water flea)

M-Factor (Chronic aquatic toxicity): 1

12.2 Persistence and degradability

Components:

fosthiazate (ISO):

Stability in water: Degradation half life: 22 - 49 d

Remarks: Product is not persistent.

12.3 Bioaccumulative potential

Components:

fosthiazate (ISO):

Bioaccumulation: Species: Lepomis macrochirus (Bluegill sunfish)

Exposure time: 672 h

Bioconcentration factor (BCF): 2.3 - 4.5

Remarks: Low bioaccumulation potential.

Partition coefficient: n-octanol/water: log Pow: 1.752

12.4 Mobility in soil

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:

fosthiazate (ISO):

Toxicity to fish: LC50 (Oncorhynchus mykiss (rainbow trout)): 114 mg/l

Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates:

EC50 (Daphnia magna (Water flea)): 0.282 mg/l

Exposure time: 48 h

M-Factor (Acute aquatic toxicity): 1

Toxicity to fish (Chronic toxicity): NOEC: 1.65 mg/l

Exposure time: 28 d

Species: Oncorhynchus mykiss (rainbow trout)

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity): NOEC: 0.06 mg/l

Exposure time: 21 d

Species: Daphnia magna (Water flea)

M-Factor (Chronic aquatic toxicity): 1

12.2 Persistence and degradability

Components:

fosthiazate (ISO):

Stability in water: Degradation half life: 22 - 49 d

Remarks: Product is not persistent.

12.3 Bioaccumulative potential

Components:

fosthiazate (ISO):

Bioaccumulation: Species: Lepomis macrochirus (Bluegill sunfish)

Exposure time: 672 h

Bioconcentration factor (BCF): 2.3 - 4.5

Remarks: Low bioaccumulation potential.

Partition coefficient: n-octanol/water: log Pow: 1.752

12.4 Mobility in soil

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:

fosthiazate (ISO):

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

EC50 (Daphnia magna (Water flea)): 0.282 mg/l

Exposure time: 48 h

M-Factor (Acute aquatic toxicity): 1

Toxicity to fish (Chronic toxicity): NOEC: 1.65 mg/l

Exposure time: 28 d

Species: Oncorhynchus mykiss (rainbow trout)

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity): NOEC: 0.06 mg/l

Exposure time: 21 d

Species: Daphnia magna (Water flea