Nemathorin[®] 10G

syngenta

Fine granule containing 10% w/w fosthiazate.

FOR USE ONLY AS AN AGRICULTURAL NEMATICIDE / INSECTICIDE

A contact nematicide/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.

IN CASE OF TOXIC OR TRANSPORT EMERGENCY RING +44 (0) 1484 538444 ANYTIME (24HR).

PROTECT FROM FROST SHAKE WELL BEFORE USE

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

10kg

FOR PROFESSIONAL USE ONLY

NEMATHORIN 10G To avoid risks to human health and the environment comply with the instructions for use.

Fine granule containing 10 %w/w fosthiazate



Danger

Toxic if swallowed.

Toxic to aquatic life with long lasting effects.

Toxic by eye contact.

Contains fosthiazate. May produce an allergic reaction. Avoid breathing dust.

Wear protective gloves/protective clothing/face protection.

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

If skin irritation or rash occurs: Get medical advice/attention.

- 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.

Dispose of contents/container to a licensed hazardous-waste disposal contractor.

PCS No. 02867

Authorisation Holder	Marketing Company
ISK Biosciences Europe NV	Syngenta Ireland Limited
Pegasus Park, De Kleetlaan 12B	Block 6, Cleaboy Business Park,
1831 Diegem	Old Kilmeaden Road, Waterford
Belgium	Tel: 051-377203

Additional Safety Information.

(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 PROTEC-TIVE GLOVES, EYE PROTECTION (GOGGLES) AND FILTERING FACEPIECE RESPIRATOR (DISPOSABLE FILTERING FACEPIECE 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 PROTEC-TION (GOGGLES) AND A FILTERING FACEPIECE RESPIRATOR (DISPOSABLE FILTERING FACEPIECE TO AT LEAST EN 149 FFP3) when cleaning contaminated equipment.

However engineering controls may replace personal protective equipment if a risk 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.

IF YOU FEEL UNWELL, seek medical advice IMMEDIATELY (show this leaflet where possible).

The product must only be applied using tractor mounted/drawn direct placement machinery. Do not apply via air-assisted placement machinery other than that referenced on the product label.

(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. DO NOT RE-USE CONTAINER FOR ANY OTHER PURPOSE.

CONDITIONS FOR USE

FOR USE ONLY AS AN AGRICULTURAL NEMATICIDE / INSECTICIDE

Crops	Max. individual dose per crop	Max number treatments	tatest time
Potatoes (Seed and Ware)	Broadcast overall application. 30 kg product/ha	One p Tcrop	ting
	siccate or harvest crops for h	ar Jranima' so	nsumption for at

least 17 weeks after application.

SYMPTOMS OF POISONING

sterase, resulting in stitulat The active ingredient fostbiazate of the nervous system, the rasy athens ervous system an the sum motor nerves. The symptoms ay inc. de excessive sweating, h ache scle twitching. First aid measures are aimed ness, faintness and sm blurred vision, m t reacti lina cholinesterase a d eliminating exposure.

FIRST A' TREAT SNT

If any otherabove symptoms occur, particularly in there is known contamination.

Call pctor , C vCE and show him this label.

Fuowing an **oral exposure**, eek me cal advise immediately and show this ontainer or label. Do NOT in side vonit g. The symptoms are of cholinesterase in bition. Consider taking veous cool for determination of blood cholinesterase activity (heparin tube).

Following a **dermal exposur**, the skin should be washed with copious amounts of tap water and so a. Contami, ated clothing and footwear should be removed. Consult a deptor/medic al service.

Following that ion exposure, leave the contaminated area immediately and more to fire h air. all a doctor/medical service.

Following **cuta exposure**, remove any contact lens at once. Eyes should be immediate in gated 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.

In the absence of cyanosis, atropine sulphate should be given intravenously in doses of 2 to 4 mg. When cyanosis is present, this dose of atropine should be given intramuscularly while simultaneously initiating measures for improving ventilation. Atropine administration should be repeated at 5 to 10 minute intervals until signs of atropine toxicity (dry, flushed skin, tachycardia, pupillary dilatation) appear. Some degree of atropinization should be maintained for at least 48 hours.

Reactivation of Cholinesterase

Pralidoxime chloride (2-PAM; Protopam chloride) will reactivate cholinesterase, and may be effective as an adjunct to atropine. In adults, inject an initial dose of 1 to 2 grams of 2-PAM, preferably as an infusion in 100 ml of normal saline, over a 15 to 20 minute period. If this is not practical or if pulmonary oedema is present, the dose should be given slowly by intravenous injection as a 5% solution in water over not less than 5 minutes. After about 1 hour, a second dose of 1 to 2 grams will be indicated if muscle weakness has not been relieved. Additional doses should be given cautiously if muscle weakness persists. If intravenous administration is not feasible, intramuscular or subcutaneous injection should be used.

It should be noted that although 2-PAM is an effective reverser of unaged phosphorylated acetylcholinesterase, its protective action is limited when used alone.

In general, 2-PAM treatment alone offers little protection against cholinesterase inhibition, while the combination of atropine and 2-PAM may offer synergistic protection. Specifically, for fosthiazate poisoning in rats, atropine alone increased the LD50, while 2-PAM alone had little effect on the LD50. The combination of atropine and 2-PAM did not appear to be more effective than atropine alone with respect to increasing the LD50 of technical fosthiazate in rats.

Substances such as morphine, epinephrine, tranquillisers and theophylline are contraindicated.

Watch for pulmonary oedema, which may develop in serious cases of poisoning even after 12 hours. At first signs of pulmonary oedema, the patient should be placed in an oxygen tent and treated symptomatically.

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.

FAILURE TO COMPLETELY BURY GRANULES IMMEDIATELY AFTER APPLICA-TION 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 nematicide/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 Paratrichodorus.

CROP SPECIFIC INFORMATION

At the time of planting

. The lifuse

For control of potato cyst nematodes: 30 kg/ha - broadcast overall and incorporated. reduction of spraing symptoms: 30 kg/ha - broadcast overall and incorporated before planting.

For reduction of wireworm damage: 20 kg/ha - broadcast and incorporated.

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.

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, 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 AP-PLICATION.

DO NOT ALLOW THE GRANULES TO STAND OVERNIGHT IN THE APPLICA-TION 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 <u>that no or only</u> 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. <u>Comply with</u> <u>operator safety measures during these manipulations</u>. The granules collected should be disposed in appropriate chemical waste.

7-3405-618 11/20 IREL/06X

Keep dry and frost proof in a suitable pesticide store between 0 and 32°C

genta Ireland contact.

STORAGE

COMPANY ADVISORY INFORMATION For the latest further advice and information on optimising product application, consult your **distributor**, a IASIS **qualified agronomist** or contact yout Syn-