

2023-6046
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NIMITZ[®] 480EC

Nematicide

Emulsifiable Concentrate

**For control/suppression of nematodes in fruiting vegetables,
cucurbits and crop subgroups 1B and 1C**

COMMERCIAL - AGRICULTURAL

ACTIVE INGREDIENTS: Fluensulfone: 480 g/L
Warning, contains the allergen soy

REGISTRATION NO.: **32821**
PEST CONTROL PRODUCTS ACT

KEEP OUT OF REACH OF CHILDREN

WARNING
EYE AND SKIN IRRITANT
POTENTIAL DERMAL SENSITIZER

ADAMA Agricultural Solutions Canada Inc.
300 – 191 Lombard Avenue
Winnipeg, Manitoba R3B 0X1
1.855.264.6262

NET CONTENTS: 1L – 200 L

READ THE LABEL BEFORE USING

For emergency medical help and health/safety inquiries call ProPharma Group at
1.877.250.9291 (24 hours a day)
For spill, leak or fire call INFOTRAC at 1.800.535.5053 (24 hours a day)

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FIRST AID

IF SWALLOWED: Call a poison control centre or doctor immediately for treatment advice. Do not induce vomiting unless told to do so by a poison control centre or doctor. Do not give any liquid to the person. Do not give anything by mouth to an unconscious person.

IF ON SKIN OR CLOTHING: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 to 20 minutes. Call a poison control center or doctor for treatment advice.

IF IN EYES: Hold eye open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

IF INHALED: Move person to fresh air. If person is not breathing, call 911 or an ambulance, and then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.

Take container, label or product name and Pest Control Product Registration Number with you when seeking medical attention. You may also contact ProPharma at 1-877-250-9291 for emergency medical treatment information.

TOXICOLOGICAL INFORMATION

Contains petroleum distillates. Vomiting may cause aspiration pneumonia

PRECAUTIONS

KEEP OUT OF REACH OF CHILDREN. Harmful if swallowed or absorbed through skin. Causes eye irritation. DO NOT get in eyes. May irritate the skin. Potential skin sensitizer. Avoid contact with skin or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

If handling more than 459 L product per person per day, use closed cab groundboom application equipment. **DO NOT** handle more than 604 L product per person per day. These restrictions are required to minimize exposure to the worker.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Wear chemical-resistant coveralls over a long-sleeved shirt, long pants, chemical-resistant gloves, socks and chemical-resistant footwear during mixing, loading, application, clean-up and repair. In addition, wear protective eyewear (goggles or face shield) during mixing, loading, clean-up and repair. Gloves are not required during application within a closed cab

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

USER SAFETY RECOMMENDATIONS

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL PRECAUTIONS

TOXIC to aquatic organisms. Observe spray buffer zones specified under DIRECTIONS FOR USE. As this product is not registered for the control of pests in aquatic systems, DO NOT use to control aquatic pests. DO NOT contaminate irrigation or drinking water supplies or aquatic habitats by cleaning of equipment or disposal of wastes. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas.

To reduce runoff from treated areas into aquatic habitats, avoid application to areas with a moderate to steep slope, compacted soil, or clay.

Avoid application when heavy rain is forecast.

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Contamination of aquatic areas as a result of runoff may be reduced by including a vegetative filter strip between the treated area and the edge of the water body.

The use of this chemical may result in contamination of groundwater particularly in areas where soils are permeable (e.g. sandy soil) and/or the depth to the water table is shallow.

This product contains an active ingredient and aromatic petroleum distillates which are toxic to aquatic organisms.

Toxic to birds.

Toxic to small wild mammals.

Toxic to certain beneficial insects. Minimize spray drift to reduce harmful effects on beneficial insects in habitats next to the application site such as hedgerows and woodland.

DIRECTIONS FOR USE

DO NOT apply by air.

DO NOT use in greenhouses.

Apply only when the potential for drift to areas of human habitation or areas of human activity such as houses, cottages, schools, and recreation areas is minimal. Take into consideration wind speed, wind direction, temperature inversions, application equipment and sprayer settings.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours.

GENERAL INFORMATION

Use NIMITZ[®] 480 EC in accordance with all label directions, warnings and cautions. NIMITZ[®] 480 EC should be used as part of an Integrated Pest Management program to control nematodes. IPM programs using cultural practices, sanitation, planting of resistant varieties to reduce infestations caused by nematodes, scouting or other detection methods, proper pest identification and rotation of nematicides with different modes of action will help prevent economic pest damage. The use of NIMITZ[®] 480 EC only controls select nematodes when they are present at the time of application. It will not control pests introduced into the soil after treatment, does not provide season long control, and does not guarantee pest free crops at harvest. Performance may be reduced if used in muck or high clay content soils.

Compatibility: Do not apply NIMITZ[®] 480 EC with any other product before testing for physical and chemical compatibility of the mixture. To determine compatibility, pour the recommended proportions of the product(s) into a suitable container. After mixing, wait for 30 minutes and check to see if the product remains mixed. If the product remains mixed, it is considered physically compatible.

RESISTANCE MANAGEMENT

The Mode of Action of NIMITZ[®] 480 EC has not yet been classified. Although resistance in nematode populations has not been proven, repeated exclusive use of any product may lead to a reduction in control due to enhanced biodegradation or other causes. Rotation with nematicides with a different mode of action is suggested. Contact your Cooperative Extension specialist, certified crop advisor and or product manufacturer for additional resistant management recommendations for additional information on resistance monitoring and management.

PRODUCT INFORMATION

NIMITZ 480 EC can be used to control Root-knot (*Meloidogyne* spp.) and root lesion nematodes (*Pratylenchus* spp.) in transplanted crops (Crop Groups 8-09 and 9: including cucumbers, melons (cantaloupes, watermelon, honeydew), squash, tomatoes (except small tomatoes), okra, eggplant, and

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peppers (bell and non-bell) as well suppress root-knot (*Meloidogyne* spp.) and root lesion nematodes (*Pratylenchus* spp.) in Crop Subgroup 1B: Root Vegetables (Except sugar beet) and Crop Subgroup 1C: Tuberous and Corm Vegetables.

A successful treatment with NIMITZ® 480 EC will not eradicate nematode populations and does not control bacteria, insects, viruses, weeds or pathogens which attack plants in treated areas.

Applications can be broadcast incorporated, banded and incorporated, or applied by drip (trickle) chemigation. Apply at a rate of 4-8 L/ha, a minimum of seven days before transplanting. Soil applications should be applied only in accordance with directions and conditions of use described in this labeling. Treated areas can be covered with plastic or left uncovered according to planting practices. NIMITZ® 480 EC does not provide residual control of nematodes. Do not apply more than one application per crop, and no more than 8 L of product per hectare, per year (365 days). Do not feed treated commodities or any residual plant material to animals. Do not plant any crops not on this label into treated land for 365 days after application of the product.

The DIRECTIONS FOR USE for this product for the uses described below were developed by persons other than ADAMA Agricultural Solutions Canada Ltd. (ADAMA) under the User Requested Minor Use Label Expansion program. For these uses, ADAMA has not fully assessed performance (efficacy) and/or crop tolerance (phytotoxicity) under all environmental conditions or for all crop varieties when used in accordance with the label. The user should test the product on a small area first, under local conditions and using standard practices, to confirm the product is suitable for widespread application.

Crop	Nematodes Suppressed	Directions for Use
CROP SUBGROUP 1B: Root Vegetables (Except sugar beet) and CROP SUBGROUP 1C: Tuberous and Corm Vegetables	Root lesion nematode (<i>Pratylenchus</i> spp.) Root-knot nematode (<i>Meloidogyne</i> spp.)	Pre-plant incorporation by broadcast application followed by incorporation, band spray followed by incorporation OR by drip irrigation under plastic. <u>Pre-Plant Incorporation Treatment:</u> Apply NIMITZ 480 EC as a broadcast spray at a rate of 4 – 8 L/ha product in a minimum of 300 L of water per hectare. Incorporate following application. For band spray application and drip irrigation under plastic, refer to the application instructions elsewhere in this label. Do not apply by air.

Application instructions:

- Timing: Pre-plant broadcast application 7-10 days prior to planting.
- Maximum of 1 application per season.
- Pre-Harvest Interval (PHI): None

APPLICATION INFORMATION

NIMITZ® 480 EC can be applied in any season when soil conditions permit. Uniform application and incorporation to moist well prepared soils is important. Soils should be free of clods, debris and plant residues which should be thoroughly incorporated to prevent interference with application or control. The soil to be treated should have sufficient moisture to support plant growth. Failure to make proper applications may result in lack of effectiveness and crop injury or illegal pesticide residues in the crop.

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MIXING, LOADING AND HANDLING INSTRUCTIONS

Add the recommended amount of NIMITZ® 480 EC to the water in the spray tank and mix well. Continue agitation at frequent intervals during application. If NIMITZ® 480 EC is to be mixed with other products or fertilizers, the physical compatibility of the mixture should be tested as described above prior to use.

NOTE: Thoroughly clean application equipment prior to use and before using for application of other pesticides.

SOIL MOISTURE MANAGEMENT

Soil moisture management can have an influence on product efficacy. For band and broadcast applications, do not apply when the wind speed favours drift beyond the areas intended for treatment. Soil moisture should be adequate for uniform mechanical incorporation and to support seed germination or plant growth. While the amount of moisture will vary with soil type, a light irrigation of 1.25 to 2.50 cm of water 1-5 days after application may increase efficacy. If applied by drip (trickle) chemigation, initial moisture should be at a level to allow the product to move uniformly from shoulder to shoulder and throughout the bed as it is being drip irrigated.

For optimal performance, all applications must be incorporated by water and/or mechanical means to a depth of 15-20 cm. Resume a normal irrigation schedule immediately after transplanting.

BROADCAST APPLICATION

Apply at a rate of 4-8 L/ha using groundboom application equipment a minimum of 7 days before transplanting. Prepare the spray mix by adding the product to the spray tank with a minimum of 300 L per hectare to obtain a uniform application. Maintain sufficient agitation during mixing and application to ensure a homogeneous spray solution. Uniformly apply the spray mix over the field and mechanically incorporate to a depth of 15-20 cm with power driven incorporation equipment to insure even distribution. A light irrigation of 1.25 to 2.50 cm of water 1-5 days after application may increase efficacy. Following transplanting, resume normal irrigation practices.

BAND APPLICATION

Prepare the spray mix as directed above. The amount of product required for a banded application will vary with the width of the planting bed and row length. Use the table of examples below to determine the amount of product required based on bed width, length and use rate.

Bed width (cm)	Linear m of bed in one hectare	ml of NIMITZ® 480 EC per 1000 linear m of bed	
		4 L/ha	8 L/ha
30	33333	120	240
46	21872	183	366
61	16404	244	488
76	13123	305	610
91	10936	366	732
122	8202	488	975
152	6562	610	1219
183	5468	732	1463

Apply the spray mixture across the band and uniformly incorporate to 15-20 cm avoiding dilution outside the band, a minimum of 7 days before transplanting. A light irrigation of 1.25 to 2.50 cm of water 1-5 days after application may increase efficacy. Following transplanting, resume normal irrigation practices. Rates should not be concentrated in the row, but should be applied based on percent of the area treated.

Field sprayer application: DO NOT apply during periods of dead calm. Avoid application of this product when winds are gusty. DO NOT apply with spray droplets smaller than the American Society of

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Agricultural Engineers (ASAE S572.1) Medium classification. Boom height must be 60 cm or less above the crop or ground.

Spray Buffer zones:

Use of the following spray methods or equipment DO NOT require a spray buffer zone: band application and drip (trickle) chemigation.

The spray buffer zones specified in the table below are required between the point of direct application and the closest downwind edge of sensitive freshwater habitats (such as lakes, rivers, sloughs, ponds, prairie potholes, creeks, marshes, streams, reservoirs and wetlands) and estuarine/marine habitats.

Required for broadcast applications.

Method of application	Crop	Spray Buffer Zones (metres) Required for the Protection of:			
		Freshwater Habitat of Depths:		Estuarine/Marine Habitats of Depths:	
		Less than 1 m	Greater than 1 m	Less than 1 m	Greater than 1 m
Field sprayer	Crop group 8-09: Fruiting vegetables (except small tomato) Crop group 9: Cucurbit Vegetables Crop Subgroup 1B: Root Vegetables (Except sugar beet) Crop Subgroup 1C: Tuberous and Corm Vegetables	3	1	1	1

When tank mixes are permitted, consult the labels of the tank-mix partners and observe the largest (most restrictive) spray buffer zone of the products involved in the tank mixture and apply using the coarsest spray (ASAE) category indicated on the labels for those tank mix partners.

Tank Mixtures

This product may be tank mixed with a fertilizer, a supplement, or with registered pest control products, whose labels also allow tank mixing, provided the entirety of both labels, including Directions For Use, Precautions, Restrictions, Environmental Precautions, and Spray Buffer Zones are followed for each product. In cases where these requirements differ between the tank mix partner labels, the most restrictive label must be followed. Do not tank mix products containing the same active ingredient unless specifically listed on this label.

In some cases, tank mixing pest control products can result in reduced pesticide efficacy or increased host crop injury. The user should contact ADAMA Agricultural Solutions Canada Ltd. at 1-855-264-6262 for information before applying any tank mix that is not specifically recommended on this label.

The spray buffer zones for this product can be modified based on weather conditions and spray equipment configuration by accessing the Spray Buffer Zone Calculator on the Pesticides portion of the Canada.ca website.

DRIP (TRICKLE) CHEMIGATION

Chemigation application: NIMITZ[®] 480 EC can be applied through low volume (ground or underground) drip, drip tape or strip tubing. Do not apply this product through any other type of irrigation system. Do not apply when wind speed causes non-uniform distribution and/or favors drift beyond the area intended for treatment. Do not apply by chemigation if the area to be treated is within 100 metres of a residential area or park

Prepare the application mix as directed above in the table of examples under Band Application. The amount of product required for a drip application will vary with the width of the planting bed, row length and wetting front of the application. Assume the wetting front is the same as the bed width for determining the rate to apply.

For drip (trickle) chemigation, NIMITZ[®] 480 EC can be added directly to the irrigation system and applied with sufficient water and duration to uniformly wet the entire bed width and root zone (15-20 cm deep) where crops are to be planted no less than 7 days before transplanting. Lack of effectiveness, crop injury or illegal pesticide residues in the crop can result from non-uniform distribution of product. Consult your equipment manufacturer or Provincial Extension specialist for calibration or application questions. NIMITZ[®] 480 EC should not be applied in conjunction with a drip line cleaning product as performance may be reduced.

The amount of water needed for an application will depend upon the initial level of soil moisture, the soil type, % organic matter and condition and the placement of the drip tape(s) as well as drip tape emitter spacing, etc. Pre-irrigate the area in a manner to wet the bed zone from shoulder to shoulder where plants are to be planted then introduce NIMITZ[®] 480 EC to distribute the product evenly in the area being treated. Allow enough time in the application cycle to apply NIMITZ[®] 480 EC into the target root zone and flush the system lines with water. Injection timing during the irrigation cycle depends upon on soil type and drip tape placement. Do not over apply system rinse water and wash the NIMITZ[®] 480 EC from the root zone. A light irrigation of 1.25 to 2.50 cm of water 1-5 days after application may increase efficacy. Following application, resume normal irrigation practices.

If NIMITZ[®] 480 EC is applied in heavy rainfall areas, avoid application during rain or when rain is forecasted within the next 24 hours. Excessive moisture immediately after application may cause this product to move past the targeted zone.

The entire irrigation system including emitters need to be checked to ensure the system is operating normally before injecting NIMITZ[®] 480 EC. A reduction of efficacy, crop injury or illegal residues can result from non-uniform distribution of treated water in the crop area. Contact your Provincial Extension Service specialists, equipment manufacturers or chemigation experts for calibration questions.

Do not connect a chemigation system used to apply pesticides to any public water system unless the pesticide label prescribed safety devices for public water systems are in place. In addition, check local and provincial regulations regarding the injection of pesticides into public water systems. A person knowledgeable of the chemigation system and responsible for its operation, or a person under the supervision of the responsible person, is responsible to shut the system down and make necessary adjustments as needed.

The drip system should be maintained and operated at a low enough pressure to prevent fogging and/or misting during applications. Inject NIMITZ[®] 480 EC into the irrigation system after the filter(s) and automatic back flush system in order to avoid back flushing of treated water.

Systems using a pressurized water and pesticide injection system must meet the following requirements:

1. The system must contain a functional check valve, vacuum relief valve and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.

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2. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
3. The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
4. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.
5. The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
6. Systems must use a metering pump, such as a positive displacement injection pump (e.g. diaphragm pump), and must be capable of being fitted with a system interlock.

RESTRICTIONS

Do not use on crops not listed on this label. Use only before transplanting a crop, and not in conjunction with direct seeded crops. Do not plant any crops not on this label into treated land for 365 days after application of the product. Do not apply more than one application per crop, and no more than 8 L of product per hectare, per year (365 days). Do not feed treated commodities or any residual plant material to animals.

STORAGE

Store the product in closed original container in a well-ventilated room at temperatures of 0°C to 37°C (32 F to 100 F). Keep out of reach of children, unauthorized persons and animals. Store this product away from food, feed, and fertilizer.

DISPOSAL

For information on disposal of unused, unwanted product, contact the manufacturer or the provincial regulatory agency. Contact the manufacturer and the provincial regulatory agency in case of a spill, and for clean-up of spills.

For recyclable containers:

Do not reuse this container for any purpose. This is a recyclable container, and is to be disposed of at a container collection site. Contact your local distributor/dealer or municipality for the location of the nearest collection site. Before taking the container to the collection site:

1. Triple- or pressure-rinse the empty container. Add the rinsings to the spray mixture in the tank.
 2. Make the empty, rinsed container unsuitable for further use.
- If there is no container collection site in your area, dispose of the container in accordance with provincial requirements.

NOTICE TO USER

This pest control product is to be used only in accordance with the directions on the label. It is an offence under the *Pest Control Products Act* to use this product in a way that is inconsistent with the directions on the label.

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