

POISON

KEEP OUT OF REACH OF CHILDREN
READ SAFETY DIRECTIONS BEFORE OPENING OR USING

Nimitz[®] 480 EC

Nematicide

ACTIVE CONSTITUENT: **480 g/L FLUENSULFONE**

SOLVENT: 428 g/L HYDROCARBON LIQUID

For control of nematodes in selected vegetable crops,
as per the Directions for Use



ADAMA

Formulation type
Emulsifiable
Concentrate

EC

adama.com

CONTENTS: 500 mL - 1000 L

DIRECTIONS FOR USE

RESTRAINTS

Use only before transplanting a crop, and not in conjunction with direct seeded crops.

DO NOT apply NIMITZ[®] to crops grown outside Queensland.

DO NOT plant any crops not specified on this label into treated land for 2 years after the last application unless otherwise stated in the rotational crop restriction table on this label.

DO NOT apply more than one application per crop, and no more than 8 L/ha per year.

DO NOT apply to tomato crops that are to be used for processing.

DO NOT irrigate to the point of runoff within 72 hours of application.

DO NOT apply if heavy rain has been forecast within 72 hours.

MANDATORY NO-SPRAY ZONES

GROUND APPLICATION ONLY

Aquatic Environment

DO NOT apply if there are aquatic or wetland areas including aquacultural ponds within 50 metres downwind from the application area from broadcast application, or 20 metres from banded application.

CROP	PEST	STATE	RATE/ha	CRITICAL COMMENTS
Transplanted crops: Cucurbits Tomatoes (not for processing) Capsicum Chilli Eggplant Okra	Root-knot nematode	Qld only	4 - 8 L	Apply a minimum of seven (7) days before transplanting. Rate selection Use the low rate in less susceptible crops and/or under low Root-knot nematode pressure where soil counts or paddock history indicate the population density is close to the economic threshold and minor yield loss is expected. Use the high rate in more susceptible crops and/or under moderate to high Root-knot nematode pressure where soil counts or paddock history indicate that the population density is above the economic threshold and significant yield loss is expected. Apply a maximum of 8 L per hectare per year.

NOT TO BE USED FOR ANY PURPOSE, OR IN ANY MANNER, CONTRARY TO THIS LABEL UNLESS AUTHORISED UNDER APPROPRIATE LEGISLATION

ADAMA

WITHHOLDING PERIOD

HARVEST: NOT REQUIRED WHEN USED AS DIRECTED
GRAZING: DO NOT GRAZE TREATED CROP, OR FEED TREATED CROP COMMODITIES TO LIVESTOCK

CROPS FOR EXPORT

Before using NIMITZ® on crops destined for export it is essential to consult your exporter or Adama to ensure that an appropriate MRL is in place in the importing country.

ROTATIONAL CROP RESTRICTIONS

Growers applying NIMITZ® must observe the following plant-back (recropping) intervals:

Table 1. Rotational crop restrictions after an application of NIMITZ®

Crop	Plant-back interval
Cucurbits, Tomatoes (not for processing), Capsicum, Chilli, Eggplant, Okra	No restriction
Cover crops (green manure crops) not used for stock food or grazing	No restriction
Lettuce	180 days
Leafy vegetables (except lettuce), Vegetable brassicas, Onions, Bananas	365 days
Sugarcane, All other crops	2 years

GENERAL INSTRUCTIONS

Only use NIMITZ® in accordance with applicable label directions.

NIMITZ® can be used to control Root-knot nematode (*Meloidogyne* spp.) in transplanted crops specified in the Directions for Use table.

A successful treatment with NIMITZ® will control Root-knot nematodes present in the treated soil zone at the time of application.

An application of NIMITZ® does not provide season long control nor guarantee crops free from root galling at harvest.

NIMITZ® will not eradicate nematode populations and does not control bacteria, insects, viruses, weeds or pathogens which attack plants in treated areas. Other management options will be required for control of these pests.

DO NOT make applications of NIMITZ® when the soil temperature is below 16°C. Key species of Root-knot nematodes that are not active below 16°C, will not absorb NIMITZ® at these temperatures and will not be controlled.

RESISTANCE MANAGEMENT

Although resistance in nematode populations has not been proven, repeated exclusive use of any product may lead to a reduction in control. Rotation with nematicides with a different mode of action is recommended.

NIMITZ® should be used as part of an Integrated Pest Management (IPM) program to control nematodes. IPM programs using cultural practices, farm hygiene, planting of resistant varieties to reduce infestations caused by nematodes, monitoring or other detection methods, proper pest identification and rotation of nematicides with different modes of action will help prevent economic pest damage.

APPLICATION

Always apply NIMITZ® a minimum of seven (7) days before transplanting. Make soil applications only in accordance with directions and conditions of use described in this label. DO NOT apply by flood irrigation or overhead irrigation systems. Treated areas can be covered with plastic or left uncovered according to planting practices.

Uniform application and incorporation to moist well prepared soils is essential. If soils are not free of clods, debris and plant residues thoroughly incorporate them into the soil to prevent interference with application or control.

NIMITZ® must always be applied to moist soil either by broadcast spray, banded spray or via drip irrigation. All applications of NIMITZ® require soil incorporation to a depth of 15-20 cm, and followed with irrigation within 3-5 days of application as per the application specific requirements below.

Avoid application during rain or when heavy rain is forecast within the next 72 hours. Excessive moisture immediately after application may cause NIMITZ® to move too quickly past the targeted zone.

Soil moisture management can have an influence on soil incorporation and efficacy of NIMITZ®. For broadcast and banded spray applications, ensure soil moisture is adequate for uniform mechanical incorporation. If applied by drip irrigation, make sure the initial soil moisture is sufficient to allow the product to move uniformly from shoulder to shoulder and throughout the bed to a depth of 15-20 cm as it is being irrigated.

Refer to Table 3 for irrigation requirements following an application of NIMITZ®.

Broadcast Application

Conventional boom spray equipment can be used to apply NIMITZ® as a broadcast spray application to the soil surface. Use a minimum spray volume of 200 L/ha to obtain a uniform application. Flat fan nozzles are recommended. Select an appropriate nozzle and pressure to produce a coarse droplet spectrum according to nozzle manufacturer specifications that refer to the ASAE S572 Standard or the BCPC Guideline. DO NOT apply NIMITZ® from a spray boom at a height greater than 50 cm above the soil surface to minimise spray drift into off-target areas.

After application, NIMITZ® must be mechanically incorporated into the soil using a rotary implement to a depth of 15-20 cm as soon as possible i.e. the same day of application. Ensure soil moisture is adequate for uniform incorporation.

After application and prior to transplanting, irrigate according to the guidelines in Table 3 for broadcast application. Following transplanting, resume normal irrigation practices.

Banded Spray Application

Using banded spray equipment allows a targeted application of NIMITZ® to only the beds where seedlings are to be transplanted, reducing the overall volume of product required. Rates should be applied based on the percentage of the area treated. Use Table 2 to determine the amount of product required based on bed width, length and use rate.

Use a minimum spray volume of 200 L/ha to obtain a uniform application. Even fan nozzles are recommended, where available, to ensure an even dose over the treated band. Select an appropriate nozzle and pressure to produce a coarse droplet spectrum according to nozzle manufacturer specifications that refer to the ASAE S572 Standard or the BCPC Guideline. DO NOT apply NIMITZ® from a spray boom at a height greater than 50 cm above the soil surface to minimise spray drift into off-target areas.

Table 2. Rate calculation for banded spray application or drip irrigation application

Bed width*	NIMITZ® rate		
	4 L/ha	6 L/ha	8 L/ha
	Amount of product per 100 m of row		
60 cm	24 mL	36 mL	48 mL
75 cm	30 mL	45 mL	60 mL
100 cm	40 mL	60 mL	80 mL
125 cm	50 mL	75 mL	100 mL

* The guidelines in this table are based on treating the entire bed width

For example:

If planting on bed widths of 60 cm and there is a total of 2000 m of row (20 x 100 m) to be treated using the high rate of 8 L/ha, the required amount of NIMITZ® is: 48 mL x 20 = 960 mL

After application, NIMITZ® must be mechanically incorporated into the soil using a rotary implement to a depth of 15-20 cm as soon as possible i.e. the same day of application. Ensure soil moisture is adequate for uniform mechanical incorporation.

After incorporation and prior to transplanting, irrigate according to the guidelines in Table 3 for banded application. Following transplanting, resume normal irrigation practices.

Drip Irrigation Application

NIMITZ® can be applied through low volume surface or subsurface drip irrigation systems.

DO NOT apply NIMITZ® through any other type of irrigation system.

Due to the availability of various drip application systems, Adama recommend that users of NIMITZ® follow the guidelines of the manufacturer of their chosen equipment which must meet the requirements below:

1. The injection pump is a critical component of the irrigation system and must be properly installed and maintained to ensure an even flow of the chemical solution to every emitter.
2. 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.
3. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump.
4. The pesticide injection pipeline must be configured to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
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 designed and constructed of material that is compatible with NIMITZ®.

It is recommended that NIMITZ® is applied by a person knowledgeable and experienced with the operation of the system as described above.

NIMITZ® should be applied with sufficient water and duration to uniformly wet the entire bed width and root zone (15 - 20 cm deep).

Calculate the amount of product required according to width of the planting bed and row length as per the guidelines in Table 2. Assume the wetting front is the same as the bed width for determining the rate to apply, or preferably use the actual wet area.

The amount of water needed for an application will depend upon the initial level of soil moisture, the soil type, % organic matter and condition, as well as the placement of the drip irrigation line, emitter spacing etc. The following steps are recommended when applying NIMITZ® through drip irrigation systems:

1. Pre-irrigate the area in a manner to wet the planting bed from shoulder to shoulder.
During the pre-irrigation process, the entire irrigation system including emitters must be checked to ensure the system is operating normally before injecting NIMITZ®.
2. Introduce NIMITZ® into the irrigation system to distribute the product evenly in the area being treated.
3. Flush the irrigation system with water to ensure no NIMITZ® remains in the system.
DO NOT over apply system rinse water and wash the NIMITZ® from the root zone.

After application and prior to transplanting, irrigate according to the guidelines in Table 3 for broadcast application. Following transplanting, resume normal irrigation practices.

TRANSPLANTING GUIDELINES

Seedlings must have two true leaves at the time of transplanting to minimise any potential post-transplant stress that may result in slower crop establishment.

SOIL MOISTURE MANAGEMENT

The objectives of soil moisture management when applying NIMITZ® are:

1. Ensure NIMITZ® reaches the target treated soil zone (a depth of 15 - 20 cm) ensuring contact with Root-knot nematodes.
2. Irrigate to ensure NIMITZ® movement away from the target root zone prior to transplanting.

The amount of water required will vary with soil type and existing soil moisture.

Excessive moisture (as rainfall and/or irrigation) immediately after application may cause the product to move past the target soil zone of 15 - 20 cm.

Table 3 below denotes the amount of water required to achieve these objectives.

Table 3. Post-application irrigation requirements prior to transplanting

Application type	Irrigation type	Soil Clay %	Irrigation schedule (mm)		
			3 DAA	5 DAA	7 DAA
Broadcast or Banded Spray Application	Overhead sprinkler	<5%	8	-	-
		≥5%	8	8	-
	Surface drip*	<5%	6	-	-
		>5%	4	4	-
	Buried drip**	<5%	11	-	-
		>5%	11	5	-
Drip Application	Surface drip*	<5%	5	-	-
		>5%	5	5	-
	Buried drip**	<5%	7	-	-
		5%-15%	11	11	-
		>15%	11	5	5
		>15%	11	5	5

DAA = Days after application.

^ These guidelines are calculated to deliver an effective irrigation to a depth 20 cm.

- No further irrigation required.

* Transplanting up to 10 cm from irrigation line.

** Transplanting up to 20 cm from irrigation line.

COMPATIBILITY

DO NOT apply NIMITZ® in a mixture with other products or fertilisers unless the physical compatibility of the mixture has been confirmed. Contact Adama for further information regarding product compatibility with NIMITZ®.

MIXING, LOADING AND HANDLING INSTRUCTIONS

Broadcast and banded spray applications

Fill the spray tank to 70% full, add the required amount of NIMITZ® to the water in the spray tank and commence agitation while adding the balance of the water to the spray tank. Continue agitation during application.

If NIMITZ® is to be mixed with other products or fertilisers, refer to the above section on compatibility prior to use.

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

Drip irrigation application

Ensure application equipment is clean after use and before using for application of other pesticides. NIMITZ® should not be applied in conjunction with a drip line cleaning product as performance may be reduced.

PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT

Very toxic to aquatic life. DO NOT contaminate wetlands or watercourses with this product or used containers.

STORAGE AND DISPOSAL

Store in the closed, original container in a cool, well-ventilated area. DO NOT store for prolonged periods in direct sunlight.

Triple or preferably pressure rinse containers before disposal. Add rinsings to spray tank. DO NOT dispose of undiluted chemicals on site. If recycling, replace cap and return clean containers to recycler or designated collection point.

If not recycling, break, crush or puncture and deliver empty packaging for appropriate disposal to an approved waste management facility. If an approved waste management facility is not available bury the empty packaging 500 mm below the surface in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots, in compliance with relevant Local, State or Territory government regulations. DO NOT burn empty containers or product.

SAFETY DIRECTIONS

Harmful, may cause lung damage if swallowed. Will irritate the eyes and skin. Repeated exposure may cause allergic disorders. Avoid contact with eyes and skin. When opening the container and preparing spray, wear cotton overalls buttoned to the neck and wrist (or equivalent clothing), elbow length chemical resistant gloves and face shield or goggles. Wash hands after use. After each day's use wash gloves and contaminated clothing.

FIRST AID

If poisoning occurs, contact a doctor or Poisons Information Centre. Phone Australia 13 11 26.

SDS

Additional information is listed in the safety data sheet (SDS). A safety data sheet for NIMITZ® 480 EC Nematicide is available from adama.com or call Customer Service on 1800 423 262.

CONDITIONS OF SALE: The use of NIMITZ® 480 EC NEMATICIDE being beyond the control of the manufacturer, no warranty expressed or implied is given by Adama Australia regarding its suitability, fitness or efficiency for any purposes for which it is used by the buyer, whether in accordance with the Directions for Use or not. Adama Australia accepts no responsibility for any consequence whatsoever resulting from the use of this product.

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