

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

Crops: Capsicums, Carrots, Chilli, Cucurbits, Eggplant, Okra,
Potatoes, Sugarcane, Sweet potato, Tomatoes

Controls: Nematode species as per the Directions for Use table



ADAMA

Formulation type
Emulsifiable
Concentrate

EC

Adama.com

CONTENTS: 500 mL - 1000 L

DIRECTIONS FOR USE

RESTRAINTS

DO NOT apply by aircraft.

When applying to cucurbits, tomatoes, capsicum, chilli, eggplant, okra and sweet potatoes use only prior to planting transplanted crops and not in conjunction with direct seeded crops.

DO NOT plant oats into treated land for 2 years after the last application, or any crops grown for export markets not specified on this label, 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 irrigate to the point of runoff within 72 hours of application.

DO NOT apply if heavy rains or storms that are likely to cause runoff are forecast within 72 hours.

DO NOT apply NIMITZ[®] via flood irrigation or overhead irrigation systems.

SPRAY DRIFT RESTRAINTS

DO NOT apply with spray droplets smaller than a COARSE spray droplet size category according to 'APVMA Compliance Instructions for Mandatory COARSE or Larger Droplet Size Categories' located under this title in the GENERAL INSTRUCTIONS section of this label.

DO NOT apply when wind speed is less than 3 or more than 20 kilometres per hour, as measured at the application site.

DO NOT apply during surface temperature inversion conditions at the application site.

Users of this product MUST make an accurate written record of the details of each spray application within 24 hours following application, and must KEEP this record for at least 2 years. The spray application details that must be recorded are: 1) date with start and finish times of application; 2) location address and paddock(s) sprayed; 3) full name of this product; 4) amount of product used per hectare and number of hectares applied to; 5) crop or situation and weed or pest; 6) wind speed and direction during application; 7) air temperature and relative humidity during application; 8) nozzle brand, type, spray angle, nozzle capacity and spray system pressure measured during application; 9) name and address of person applying this product. (Additional record details may be required by the state or territory where this product is used.)

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.

MANDATORY NO-SPRAY ZONES

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.

TABLE 1. FRUITING VEGETABLES

CROP	PEST	STATE	RATE/ha	CRITICAL COMMENTS
Transplanted crops: Cucurbits Tomatoes Capsicum Chilli Eggplant Okra	Root-knot nematode (<i>Meloidogyne</i> spp.)	All states	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 and not more than one application / crop.

TABLE 2. ROOT AND TUBER VEGETABLES

CROP	PEST	STATE	RATE/ha	CRITICAL COMMENTS
Carrots, Potatoes, Sweet potatoes	Root-knot nematode (<i>Meloidogyne</i> spp.)	All states	4 – 8 L	Apply a single application of NIMITZ® a minimum of seven (7) days prior to: Sowing carrots and potatoes; or planting sweet potato vine cuttings. Rate selection Use the low rate 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 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. Application Apply NIMITZ® as a broadcast or banded spray application and mechanically incorporate uniformly to a depth of 15–20 cm as soon as possible i.e. on the day of application. Irrigate to field capacity immediately after planting to a depth of 15–20 cm. Refer to the band application guidelines section below for more information on calculating the rate according to the treated band width. Apply a maximum of 8 L per hectare per year and not more than one application / crop.

TABLE 3. SUGARCANE

CROP	PEST	STATE	RATE/ha	CRITICAL COMMENTS
Sugarcane	Root-knot nematode (<i>Meloidogyne</i> spp.), Root lesion nematode (<i>Pratylenchus zaeae</i>)	QLD, NSW, NT, WA	4 L	Application Apply a single application of NIMITZ® as a spray into the furrow at planting. Use a spray nozzle that will deliver a coarse spray quality in a minimum volume of 100 L/ha, in a band 30–50 cm wide over the centre of the row immediately prior to soil cover being brought in over the sett. Refer to the band application guidelines section below for more information on calculating the rate according to the treated band width.

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

WITHHOLDING PERIOD

HARVEST AND GRAZING: NOT REQUIRED WHEN USED AS DIRECTED.

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 4. Rotational crop restrictions after an application of NIMITZ®

Crop	Plant-back interval
Cover crops (green manure crops) and pastures	No restriction
Cucurbits, Tomatoes, Capsicum, Chilli, Eggplant, Okra, Carrots, Potatoes, Sugarcane, Sweet potatoes	No restriction
Other non-root/tuber vegetables	30 days
Other root and tuber vegetables	180 days
Oats and oaten hay	2 years
All other crops (not for export)	180 days

GENERAL INSTRUCTIONS

Only use NIMITZ® in accordance with applicable label directions.

NIMITZ® can be used to control Root-knot nematode (*Meloidogyne* spp.) and/or Root lesion nematode (*Pratylenchus zaeae*) in crops specified in the Directions for Use table. A successful treatment with NIMITZ® will control 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 nematode root damage 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.

NIMITZ® works on nematodes that are active in the soil. DO NOT make applications of NIMITZ® when the soil temperature does not allow nematode activity (below 16°C). Key species of nematodes that are not active below 16°C, will not absorb NIMITZ® at these temperatures and will not be controlled.

APVMA Compliance Instructions for Mandatory COARSE or Larger Droplet Size Categories

These instructions inform those using this chemical product how to lawfully comply with the requirement of a COARSE or larger spray droplet size category for spray application.

Spray droplet size categories are defined in the ASAE S572 Standard (newer name may also be shown as ASABE) or the BCPC guideline. Nozzle manufacturers may refer to one or both of these documents, to identify droplet size categories; however, for a nozzle to comply with this requirement, the manufacturer must refer to at least one.

Complying with the label requirement to use a specific droplet size category means using the correct nozzle that will deliver that droplet size category under the spray operation conditions being used. The APVMA has approved only the following specific methods for choosing the correct nozzle. Use one of the methods specified in these instructions to select a correct nozzle to deliver a COARSE or larger droplet size category.

USE ONLY nozzles that the nozzles' manufacturer has rated to deliver a COARSE, a VERY COARSE or an EXTREMELY COARSE droplet size category, as referenced in ASAE S572 or BCPC. Choose a nozzle that is specified to provide the droplet size category required in the label Spray Drift Restraints.

DO NOT use a higher spray system pressure than the maximum the manufacturer specifies for the selected nozzle to deliver the droplet size category required in the label Spray Drift Restraint.

APPLICATION

All crops

Apply only in accordance with directions and conditions of use described in this label. 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.

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.

DO NOT apply by flood irrigation or overhead irrigation systems.

Sugarcane

For use in sugarcane, irrigation is not required to incorporate NIMITZ[®] post-planting. If applied at planting according to the directions for use, this will be sufficient to incorporate NIMITZ[®].

Fruiting vegetables, root and tuber vegetables

Always apply NIMITZ[®] a minimum of seven (7) days before planting.

Treated areas can be covered with plastic or left uncovered according to planting practices.

NIMITZ[®] must only be applied to vegetable crops according to the following application methods:

- Fruiting vegetables: Broadcast spray, banded spray or via drip irrigation.
- Root and tuber vegetables: Broadcast spray or banded spray.

DO NOT apply to root and tuber vegetables via drip irrigation.

All applications of NIMITZ[®] to fruiting vegetables and root and tuber vegetables require soil incorporation to a depth of 15–20 cm. In fruiting vegetables application of NIMITZ[®] must be followed with irrigation within 3–5 days of application as per the application specific requirements below. In root and tuber vegetables, irrigation immediately after planting is recommended to field capacity to a depth of 15–20 cm.

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 (in fruiting vegetables only), 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 6 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 planting, irrigate according to the guidelines in Table 6 for broadcast application. Following planting, resume normal irrigation practices.

Banded Spray Application

Banded applications can be used to target treatment of NIMITZ[®] to only the beds where seedlings are to be planted, reducing the overall volume of product required. Rates should be applied based on the actual area treated. Use Table 5 to determine the amount of product required based on bed width, length and use rate.

When applying prior to planting fruiting vegetables and root and tuber vegetables, use a minimum spray volume of 200 L/ha to obtain a uniform application. For applications of NIMITZ[®] in sugarcane, use a minimum spray volume of 100 L/ha. 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 5. Rate calculation for banded spray application or drip irrigation application

Treated band/ bed width	NIMITZ [®] rate		
	4 L/ha	6 L/ha	8 L/ha
	Amount of product per 100 m of row		
30 cm	12 mL	18 mL	24 mL
40 cm	16 mL	24 mL	32 mL
50 cm	20 mL	30 mL	40 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

For example: If planting on bed widths of 50 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: 40 mL x 20 = 800 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 planting fruiting vegetables and root and tuber vegetables, irrigate according to the guidelines in Table 6 for banded application. Following planting, resume normal irrigation practices.

Drip Irrigation Application

NIMITZ[®] can be applied to fruiting vegetables through low volume surface or subsurface drip irrigation systems.

DO NOT apply NIMITZ[®] through any other type of irrigation system. DO NOT apply NIMITZ[®] to root and tuber crops or sugarcane via drip irrigation.

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 5. 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 planting, irrigate according to the guidelines in Table 6 for broadcast application. Following planting, resume normal irrigation practices.

GUIDELINES FOR TRANSPLANTED CROPS

Cucurbits, tomatoes, capsicums, chilli, eggplant and okra

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

Sweet potatoes

Vine cuttings should be 25–45 cm in length at the time of planting to minimize any potential post-transplant stress that may result in slower crop establishment.

SOIL MOISTURE MANAGEMENT

The objectives of soil moisture management when applying NIMITZ® in fruiting vegetables and root and tuber vegetables are:

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

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

Table 6. 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 (Fruiting vegetables only)	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.

§ If flood irrigation is practiced, contact your local Adama representative for guidance on incorporation of NIMITZ® by flood irrigation.

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.

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.

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.

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.

drumMUSTER Containers: This container can be recycled if it is clean, dry, free of visible residues and has the *drumMUSTER* logo visible. Triple-rinse container for disposal. Dispose of rinsate by adding it to the spray tank. DO NOT dispose of undiluted chemical on site. Wash outside of the container and the cap. Store cleaned container in a sheltered place with cap removed. It will then be acceptable for recycling at any *drumMUSTER* collection or similar container management program site. The cap should not be replaced, but may be taken separately.

Refillable Containers: Empty contents fully into application equipment. Close all valves and return to point of supply for refill or storage.

SAFETY DIRECTIONS

Harmful 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, face shield or goggles and contaminated clothing.

FIRST AID

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

SDS

If additional hazard information is required refer to the Safety Data Sheet (SDS). A safety data sheet for NIMITZ® is available at adama.com or call Customer Service 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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