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CLEAN CROP

NEMASOL®

42%

A SOIL FUMIGANT SOLUTION FOR ALL CROPS
MAY BE APPLIED BY SOIL INJECTION OR CHEMIGATION
FOR SUPPRESSION OF SOIL-BORNE PESTS THAT ATTACK ORNAMENTALS, FOOD AND FIBER CROPS.

Suppresses Weeds such as Annual Bluegrass, Bermudagrass, Chickweed, Dandelion, Ragweed, Henbit, Lambsquarter, *Amaranthus* species, Watergrass, Johnsongrass, Nutgrass, Wild Morningglory and Purslane, Nematodes and Symphylids. Soil-Borne diseases such as Rhizoctonia, *Pythium, Phytophthora, Verticillium, Sclerotinia, Oak Root Fungus* and Club Root of Crucifers.

ACTIVE INGREDIENT:	
Sodium methyldithiocarbamate (anhydrous)	42.0%
INERT INGREDIENTS:	58.0%
TOTAL	100.0%

Contains 4.26 lbs. METAM SODIUM per gallon.

KEEP OUT OF REACH OF CHILDREN

DANGER PELIGRO

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

For Emergencies call 24 hours a day:
***Transportation:* Chemtrec 1-800-424-9300**

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PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS

DANGER

Corrosive: Causes skin damage. May be fatal if absorbed through the skin. Do not get on skin or clothing. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Harmful if swallowed. Harmful if inhaled. Irritating to eyes, nose, and throat. Avoid breathing vapor or spray mist. Irritating to eyes. Do not get in eyes.

STATEMENT OF PRACTICAL TREATMENT

Immediately start the procedures below and contact a Poison Control Center, a physician or the nearest hospital. Describe the type and extent of exposure, the victim's symptoms, and follow the advice given.

IF ON SKIN: Immediately flush skin with large amounts of running water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention immediately.

IF IN EYES: Immediately flush eyes with large amounts of water for at least 15 minutes. Hold eye lids apart to ensure rinsing of the entire surface of the eye and lids with water. Get medical attention immediately.

IF INHALED: Remove to fresh air. If not breathing, clear the victim's airway and start mouth to mouth artificial respiration. If breathing is difficult, give oxygen, preferably with a physician's advice. Get medical attention immediately.

IF SWALLOWED: Immediately give several glasses of water but do not induce vomiting. If vomiting occurs, give fluids again. Have a physician determine if condition of patient will permit induction of vomiting or evacuation of stomach. Do not give anything by mouth to an unconscious or convulsing person.

FOR A MEDICAL EMERGENCY INVOLVING THE USE OF THIS PRODUCT CALL: 1-800-228- 5635, EXT. 136, OR CALL COLLECT, 612-851-8180, EXT. 136.

PERSONAL PROTECTIVE EQUIPMENT (PPE):

(1) *Handlers Performing Direct-Contact Tasks. Direct-contact tasks* include: mixing, loading, or fumigant transfer with or without dry-disconnect fittings, equipment calibration or adjustment, equipment cleanup and repair, product sampling, application or soil-sealing outside an enclosed cab, any activity less than 6 feet from an unshielded pressurized hose containing this product, spill cleanup, removal of tarp or plastic film, rinsate disposal, cleanup of small spills, preparing containers for aeration, any other handling task not otherwise listed in (2) or (3) below.

Applicators and other handlers performing direct-contact activities must wear: coveralls over long-sleeved shirt and long pants, waterproof gloves, chemical-resistant footwear plus socks, chemical-resistant headgear for overhead exposure, chemical-resistant apron when cleaning equipment, or when mixing, loading, or transferring without dry-disconnect fittings, face-sealing goggles, unless full-face respirator is worn, a respirator with either an organic-vapor-removing cartridge with a prefilter approved for pesticides (MSHA/NIOSH approval number prefix TC-23C), or a canister approved for pesticides (MSHA/NIOSH approval number prefix TC-14G).

(2) Handlers in Enclosed Cabs. Applicators and other handlers in enclosed cabs must wear: coveralls, shoes and socks.

Plus, if pungent, rotten-egg odor of this product can be detected inside the enclosed cab, the handlers in the cab must wear: face-sealing goggles, unless full-face respirator is worn, a respirator with either an organic-vapor-removing cartridge with a prefilter approved for pesticides (MSHA/NIOSH approval number prefix TC-23C), or a canister approved for pesticides (MSHA/NIOSH approval number prefix TC-14G).

In addition, the PPE specified in (1) for direct-contact activities must be immediately available in the enclosed cab and must be worn if the handler leaves the enclosed cab to perform any direct-contact activity.

The enclosed cab must meet the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides—40CFR 170.240(d)(5).

(3) Handlers in Treated Areas While Entry is Restricted.

While entry is restricted (see "Entry Restrictions" in the Agricultural Use Requirements box elsewhere in this labeling), only the following handlings tasks may be performed in a treated area outdoors: assessing/adjusting the soil seal, assessing pest control, application technique, or application efficacy, operating ventilation equipment, sampling air or soil for this product.

All other tasks are prohibited until the entry restriction is over.

Handlers performing the above tasks must wear: coveralls over long-sleeved shirt and long pants, waterproof gloves, chemical-resistant footwear and socks.

Plus: If pungent, rotten egg odor of this product can be detected outdoors: face-sealing goggles (unless full-face respirator is worn) and a respirator with either an organic-vapor-removing cartridge with a prefilter approved for pesticides (MSHA/NIOSH approval number prefix TC-23C), or a canister approved for pesticides (MSHA/NIOSH approval number prefix TC-14G).

USER SAFETY REQUIREMENTS:

1. Respirator Requirements: When a respirator is required for use with this product, the following criteria must be met:
   a. Cartridges or canisters must be replaced daily or when odor or irritation from this product becomes apparent, whichever is sooner.
   b. Respirators must be fit-tested and fit-checked using a program that conforms to OSHA's requirements (described in 29 CFR Part 1910.134).
2. Dispose of Contaminated Clothing: Discard clothing and other absorbent materials that have been drenched or heavily contaminated with liquid from this product. Do not reuse them.
3. Clean and Maintain PPE: 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. Wash PPE after each day's use.

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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 HAZARDS

Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters. This product is toxic to fish.

Do not contaminate irrigation ditches or water used for irrigation or domestic purposes. Do not apply when conditions favor drift from treated areas.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation. Do not apply this product through any irrigation system unless the chemigation instructions on this label are followed.

CALIFORNIA ONLY: Application must be in compliance with Technical Information Bulletin-California: Metam Sodium "Guidelines for all Application Methods for Metam Sodium in California." This information bulletin may be obtained from your local pesticide dealer or a Metam Sodium registrant.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), restricted-entry intervals, and notification to workers. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard (WPS).

ENTRY RESTRICTIONS:

Outdoors: Entry (including early entry that would otherwise be permitted under the WPS) by any person — other than a correctly trained and equipped handler who is performing a handling task permitted on this labeling — is PROHIBITED from the start of application until 48 hours after application. In addition, if tarps are used for the application, non-handler entry is prohibited while tarps are being removed.

NOTIFICATION: Notify workers of the application by warning them orally and by posting warning signs. The sign must state (1) "DANGER/PELIGRO," (2) "PESTICIDES/PESTICIDAS," (3) "KEEP OUT/NO ENTRE," (4) the date and time of fumigation, (5) NEMASOL 42%, and (6) "name, address, and telephone number of the applicator." Post the WPS sign in compliance with 40 CFR Part 170, and follow the WPS requirements pertaining to location, legibility, color, size, and timing of posting and removal.

Outdoors: Post the fumigant warning signs at entrances to treated areas.

PPE FOR ENTRY DURING THE RESTRICTED PERIOD: PPE for entry that is permitted by this labeling is listed in the "Hazards to Humans and Domestic Animals" section of this labeling.

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

STORAGE: Store product in a cool, dry, locked place out of reach of children. Do not store below 0°F. Product crystallizes at lower temperatures. If exposed, warm or store at higher temperatures and mix to redissolve crystals and assure uniformity before use.

PESTICIDE DISPOSAL: Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste Representative at the nearest EPA regional office for guidance.

CONTAINER DISPOSAL: (METAL) Triple rinse or equivalent. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities. (PLASTIC) Triple rinse or equivalent. Puncture and dispose of in a sanitary landfill, or by incineration, or if allowed by State and local authorities by burning. If burned stay out of smoke.

GENERAL INSTRUCTIONS

Before applying this product always thoroughly cultivate the area to be treated, breaking up clods and loosening soil deeply and thoroughly. A week before treatment, moisten soil after cultivation to the desired depth; sprinkle or flood irrigate. This step is essential for all methods of use. Immediately before application, cultivate lightly if the soil has crusted.

See FIELD PREPARATION PRIOR TO APPLICATION section for specific directions on the application of NEMASOL 42% to fields where no-till stubble or cover crop exist. To prevent loss from evaporation, use only at times when air temperature is moderate and there is little wind movement. Soil temperature must be from 40° to 90°F in the treated zone. Treated zone is defined as the depth of treatment that NEMASOL 42% achieves at the time of application. For other conditions, see section, "CULTIVATION AND PLANTING AFTER APPLICATION". Do not apply to soil surface, as in the sprinkler method, when air temperature is over 90°F or when low humidity or high winds would cause loss of NEMASOL 42% before it can be drenched into the soil with additional water. If fumes become unpleasant during treatment, apply more water to seal the fumes into the soil where they should be confined to achieve maximum fumigation benefit.

The activity of NEMASOL 42% is increased by the use of tarp (plastic, paper or fabric) spread loosely over the treated areas and secured to prevent removal by wind. Keep covered for a minimum period of 48 hours. Seven days after treatment cultivate areas to depth of 2 inches to aerate the soil. Do not seed earlier than 21 days after application when tarping method is used. Use promptly after mixing with water. Do not allow solution to stand. Flush equipment with water after each day's use. Disassemble valves and clean carefully.

PRODUCT INFORMATION

NEMASOL 42% is a water soluble liquid. When applied to properly prepared soil, the liquid is converted into a gaseous fumigant. After sufficient interval of time, the gas dissipates leaving the soil ready for planting.

WHEN TO USE MAXIMUM AND MINIMUM RATES

The application rate of NEMASOL 42% is dependent on the soil type to be tr[illegible] and the position in the soil of the pest to be suppressed or controlled. Generally a light sandy soil requires a lower application rate than a heavier mineral soil. In addition, if the pest is in the upper portion of the soil profile (annual weeds) a lower application rate is generally required than if the pest is deeper in the soil profile and deeper penetration is desired (perennial weeds seeds). When a range of application rates is given in this label consult your local agricultural extension service for more specific information.

NEMASOL 42% is recommended for the suppression of the following soil-borne pests that attack ornamental, food and fiber crops:

Weeds and germinating weed seeds; Annual Bluegrass, Bermudagrass, Chickweed, Dandelion, Ragweed, Henbit, Lambsquarter, Amaranthus spp. (Pigweed & Careless Weed), Watergrass, Johnsongrass, Nutgrass, Wild Morningglory and Purslane; **Nematodes and Symphylids** (Garden Centipede) and **Soil-borne Diseases** such as Rhizoctonia, Pythium, Phytophthora, Verticillium, Sclerotinia, Oak Root Fungus and Club Root of Crucifers.

USE PRECAUTIONS

Keep children and pets out of treated areas. All NEMASOL 42% uses described on this label are intended for pre-plant soil preparation only. All plant foliage and any established plants growing on the treatment sites will be either severely damaged or destroyed.

Keep the product off of any desirable turf or plants. Do not apply within three feet of the drip line of desirable plants, shrubs or trees. Do not use in confined area where fumes may enter nearby dwellings. Do not use in greenhouses. Keep container tightly closed when not in use. Do not store near feed or food.

NOTE: NEMASOL 42% will suppress only those pests in the fumigation zone at the time of treatment. Reinfestation may occur subsequent to the fumigants dissipation from the soil.

TREATMENT GUIDELINES:

For optimum results, certain procedures should be observed at designated times in the treatment program. Described below are important guidelines for each of the four stages of the treatment process.

- Pre-Application planning
- Field preparation prior to application
- Application
- Preparation for planting after application

Consult your sales representative for the appropriate treatment program for your particular needs.

PLANNING AN APPLICATION:

NEMASOL 42% is applied after harvest and 14-21 days before a new crop is planted. In some areas, fall applications are preferred as the product will dissipate over the winter which allows planting to begin as soon as favorable spring time conditions arrive.

APPLICATION RATE

Apply 30 to 75 gallons of this product per treated acre depending on crop, target pest and soil properties. Some of the soil properties to consider when determining the application rate include soil texture, percent organic matter and depth of soil to be treated.

TARGET PEST AND DEPTH OF TREATMENT

When application rates for this product are given in ranges, use the higher rate if

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pests (insects, nematodes, etc.) are present in high numbers or if the area to be treated has a history of pest problems. Consult with your state Nematologist, Entomologist and Plant Pathologist to determine if crop rotation is more feasible or desirable than fumigation

NOTE: This product will only suppress pests that are in the fumigated zone at time of treatment. For control of weeds and fungi which cause seed or seedling diseases, treatment of only the top 2 to 4 inches of soil may be required. Treatment depths greater than 4 inches may be required for control of Nematodes and fungi which occur throughout the rhizosphere. The required application rate should be increased proportionately with the depth of the treatment required. Always choose the appropriate application method to evenly distribute this product throughout the soil to the required treatment depth.

SOIL CHARACTERISTICS
Soil properties to consider when determining the application rate of this product include the depth of soil to be treated, soil texture, and percent organic matter.
Plant materials under the soil surface (except in the case of cover crops) should be thoroughly decomposed before application. Due to the absorbing effect of humus, soils with high levels of organic matter under the surface require higher rates. For example, muck soils require twice the rate that would be used in mineral soils.
Application rates will also vary with soil texture. For instance, heavy clay soils require a higher rate than light sandy soil.

FIELD PREPARATION PRIOR TO APPLICATION
Before applying this product, always thoroughly cultivate the area to be treated, breaking up clods and loosening soil deeply and thoroughly. Then sprinkle or flood irrigate to moisten loosened soil if needed. Immediately before treatment, cultivate lightly to break up soil crust. On sandy (coarse) soils, NEMASOL 42% may be applied to crop stubble or vegetation. When compaction exists in the soil profile to be treated, use chisel or ripper to remove compaction prior to application. Apply according to methods and rates outlined in the section "USES, RATES AND APPLICATION METHODS, Field Application Where Entire Area Is Being Treated, Sprinkler System".

APPLICATION OF NEMASOL 42%
Apply according to the methods and rates outlined below under the section "USES, RATES AND APPLICATION METHODS".

AIR TEMPERATURES DURING TREATMENT
To prevent loss from evaporation, use only at times when air temperature is moderate and there is little wind movement. Do not apply to soil surface, as in the sprinkler irrigation method, when air temperature at time of application is 90°F or higher or when high winds or low humidity would cause loss of NEMASOL 42% before it can be drenched into the soil with additional water.

SOIL TEMPERATURE DURING TREATMENT
Soil temperature must be from 40°F to 90°F in the treated zone. Treated zone is defined as the depth of treatment that NEMASOL 42% achieves at the time of application. To prevent rapid evaporation of the product from the soil, avoid treating soil during time of day when soil temperatures exceed 90°F two inches deep. Instead, make the application at night or in early morning when the soil temperature is coolest.

SOIL MOISTURE AT TIME OF TREATMENT
Applications should be made only to fields with "good seed bed moisture conditions" (50 to 80% of field capacity). As a simple field test, squeeze a handful of soil into a ball and then gently try to break it apart with your fingers. If it does not ball, it is too dry. If it balls but breaks easily, the soil moisture content is sufficient. If it will not break apart easily or if water can be squeezed out, it is too wet.
When necessary, sprinkle or flood irrigate the soil 1 to 2 weeks prior to treatment to increase the moisture content. The soil must be moistened to at least the desired treatment depth.

PHYTOTOXICITY
NEMASOL 42% is phytotoxic. Protect valuable, non-target plants by stopping soil applications of this product at least 3 feet short of the drip line of trees, shrubs and other desirable plants. For sprinkler application, crop injury and lack of effectiveness, can result from nonuniform distribution of the treated water.

USE OF DILUTED NEMASOL 42%
Do not store the diluted product. Do not allow the diluted solution to stand overnight. Use the diluted solution promptly after mixing with water. Flush all equipment with water after each day's use, disassemble valves and clean carefully.

ODORS DURING OR AFTER APPLICATION
Strong odors during or after application are a signal that the fumigant is escaping and needs to be sealed in the soil. If increasingly strong odors are occurring, the application should be stopped immediately and not resumed until the source of the odor problem is identified and corrected. For sprinkler applications or whenever possible with other application methods, a water seal should be applied immediately to the treated areas of the field.
The water seal is a light application of water, repeated as necessary to prevent odor escapes. Excessive water applied as a seal will void the surface treatment.

SEALING NEMASOL 42% IN SOIL
To be most effective, NEMASOL 42% should be sealed in the soil at the time of application.
Sealing methods include applying a water seal by sprinkler irrigation, tarping (plastic, paper or fabric) or packing soil with a roller, drag or press wheel, or similar device, or cover with an adequate amount of soil to seal the fumigant into the soil. Tarpaulins should be spread loosely over the treated area and secured to prevent removal by wind. They should remain in place for at least 48 hours. If tarped, the sealed area should be cultivated to a depth of 2 inches to aerate the soil seven days after treatment. When tarpaulins are used to seal the soil, wait at least 21 days before planting.

APPLICATION IN TANK MIX WITH LIQUID FERTILIZER
NEMASOL 42% may be injected in a mixture with liquid fertilizers. Since the composition of liquid fertilizers vary considerably, the physical compatibility of each NEMASOL 42%/fertilizer tank mix should be checked by using the following procedure:
Mix a small quantity of NEMASOL 42% and liquid fertilizer in the same ratio as they will be applied to the field, i.e., if 40 gallons of NEMASOL 42% and 40 gallons of liquid fertilizer are to be applied per acre, then the mixture should be mixed in a 40:40 or 1:1 ratio. Mix in a glass container and agitate the liquids to attain a complete uniform mixture.
If a uniform mix cannot be made, the mixture should not be used. If the mixture remains uniform for 30 minutes, without agitation, the combination may be used. Should the mixture separate after 30 minutes, but is readily remixed with agitation, the mixture can be used if adequate agitation is maintained in the tank.
DO NOT PLACE CAPS ON MIX JAR AS INCOMPATIBLE MIXES MAY EVOLVE HYDROGEN SULFIDE GAS. USE PROMPTLY AFTER MIXING WITH WATER OR FERTILIZER. DO NOT ALLOW THE SOLUTION TO STAND. FLUSH ALL EQUIPMENT WITH WATER AFTER EACH DAYS USE. DISASSEMBLE VALVES AND CLEAN CAREFULLY.

GENERAL PRECAUTIONS FOR IRRIGATION SYSTEMS:
Posting of areas to be chemigated is required when 1) any part of a treated area is within 300 feet of sensitive areas such as residential areas, labor camps, businesses, day care center, hospitals, in-patient clinics, nursing homes or any public areas such as schools, parks, playgrounds, or other public facilities not including public roads, or 2) when chemigated area is open to the public such as golf courses.
Posting must conform to the following requirements. Treated areas shall be posted with signs at all usual points of entry and along likely routes of approach from the listed sensitive areas. When there are no usual points of entry, signs must be posted in the corners of the treated areas and in any other locations affording maximum visibility to sensitive areas. The printed side of the sign should face away from the treated area towards the sensitive area. The signs shall be printed in English. Signs must be posted prior to application and must remain posted until foliage has dried and soil surface water has disappeared. Signs may remain in place indefinitely as long as they are composed of materials to prevent deterioration and maintain legibility for the duration of the posting period.
All words shall consist of letters of at least 2½ inches tall, and all letters and the symbol shall be a color which sharply contrasts with their immediate background. At the top of the sign shall be the words KEEP OUT, followed by an octagonal stop sign symbol of at least 8 inches in diameter containing the word STOP. Below the symbol shall be the words PESTICIDES IN IRRIGATION WATER.
This sign is in addition to any sign posted to comply with the Worker Protection Standard.

STATEMENTS CONCERNING CHEMIGATION OF NEMASOL 42%

When applying by chemigation methods, the following directions or warnings must be observed. Apply this product only through sprinkler including center pivot, lateral move, end tow, side (wheel) roll, traveler, big gun, solid set, or hand move; flood (basin); furrow; border or drip (trickle) irrigation system(s).
Do not apply this product through any other type of irrigation system. Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from nonuniform distribution of treated water. If you have questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts. Do not connect an irrigation system (including greenhouse systems) used for pesticide application to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place. A person knowledgeable of the chemigation system and responsible for its operation or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

OBSERVE THE FOLLOWING PRECAUTIONS IF YOUR CHEMIGATION SYSTEM IS CONNECTED TO A PUBLIC WATER SYSTEM

NOTE: PLATTE CHEMICAL CO. DOES NOT ENCOURAGE CONNECTION OF CHEMIGATION SYSTEMS TO PUBLIC WATER SYSTEMS. THE FOLLOWING INFORMATION IS PROVIDED FOR USERS WHO HAVE EVALUATED ALTERNATIVE APPLICATION AND WATER SOURCE OPTIONS BEFORE CHOOSING TO MAKE SUCH A CONNECTION.

Public water system is defined as a system for the provision to the public of piped water for human consumption if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of a year.
Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone, backflow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction.

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There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top of overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.
The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid toward the injection pump.
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.
The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops, or in the cases where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected.
Systems must use a metering pump, such as a positive displacement injection pump (e.g. diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.
Do not apply when wind speed favors drift beyond the area intended for treatment.

SPRINKLER CHEMIGATION SYSTEMS

See Uses, Rates and Application Methods — Field Application Where Entire Area Is Being Treated Section.

STATEMENTS CONCERNING THE OPERATION OF SPRINKLER CHEMIGATION; DRIP (TRICKLE); OR OTHER APPROVED SYSTEMS UTILIZING A PRESSURIZED WATER AND PESTICIDE INJECTION SYSTEM

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. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid toward the injection pump. 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.
The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops. 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.
Systems must use a metering pump, such as a positive displacement injection pump (e.g. diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock. Do not apply when wind speed favors drift beyond the area intended for treatment.

STATEMENTS CONCERNING FLOOD (BASIN), FURROW AND BORDER CHEMIGATION

Systems utilizing a pressurized water and pesticide injection system must meet the requirements for sprinkler chemigation systems.
Systems using a gravity flow pesticide dispensing system must meter the pesticide into the water at the head of the field and downstream of a hydraulic discontinuity such as a drop structure or weir box to decrease potential for water source contamination from backflow if water flow stops.
Do not dilute in supply tanks. Agitation of supply tank recommended after freezing.

PREPARATION FOR PLANTING AFTER APPLICATION OF NEMASOL 42%

Effect of Rains
If a NEMASOL 42% application is rained on less than 24 hours after treatment, lack of control at and near the soil surface may occur.

Recontamination:
Precautions must be taken to prevent recontamination of treated fields with plant pathogenic fungi, plant parasitic nematodes or weed seed. Use clean seeds or plants. Before farm equipment is driven into the treated area, it should be rinsed free of untreated soil and weed seeds from other fields.

Interval Between Treatment and Planting:
Because NEMASOL 42% is harmful to germinating seeds and living plants, an appropriate interval must be observed between treatment and planting. On well drained soils which have a light to medium texture and which are not excessively wet or cold following the application, planting can begin 14 to 21 days after treatment. If soils are heavy or especially high in organic matter or if the soils remain wet and/or cold (below 60°F) following the application, a minimum interval of 21 days or greater should be observed. The interval before planting should be extended until the soil is sufficiently dry to allow for cultivation.

Aeration of Soils Before Planting
Important: Heavier soils, including soils high in clay or organic matter should be allowed to aerate and dry thoroughly after treatment with NEMASOL 42%. During cold and/or wet weather, frequent shallow cultivation can aid dissipation of NEMASOL 42% from the treated soils.
On heavy, wet soils, light surface cultivation to break up crusting and promote drying should be done 5 to 7 days after treatment. This cultivation may be repeated as necessary. NOTE: To avoid reinfecting treated soils, care should be taken to assure that untreated soils are not mixed with treated soils.

Testing of Treated Soils Before Planting
Fields are fumigated to control soil-borne fungi, nematodes, insects, and weeds. The length of time required for fumigants to escape from the soil before plants can safely be planted varies greatly. Typically 14 days are needed under typical conditions, however, circumstances which do not favor volatilization (evaporation) of the fumigant can greatly lengthen the waiting period (i.e., up to 30 days). The release period is short with (1) low rates of fumigant; (2) light soil; (3) high soil temperatures; (4) low soil moisture; (5) shallow application depth and (6) repeated cultivations after fumigation. Seeded crops are less susceptible to residual soil fumigant injury than transplanted crops. In general, fumigants escape slowly from cold, wet, heavy soils.

The information below describes two simple tests to assay for harmful, residual soil fumigants before planting.

Lettuce Seed Test
1. With a trowel dig into the treated soil to, or just below, the depth of application. Remove 2 to 4 small (1-2 oz) soil samples, mix briefly, and immediately place a portion in an air tight jar so that fumes will not escape. Use mason jars, wheat germ jars or similar jars with gas tight lids.
2. Sprinkle lettuce seed on the moistened surface of the soil and recap immediately. Prepare a similar jar with untreated soil (an untreated check) for comparison.
3. Place the jars at 65 to 85 degrees F in indirect sunlight (direct sunlight may kill the seed by overheating). Lettuce seed will not germinate in the dark.
4. Inspect the jars for germination in one to three days.
5. The soil is safe to plant if seed germinate as well in the treated soil as the untreated control.

NOTE

A. Be sure to sample the field properly in several areas, particularly low, wet sites.
B. Be sure that the lids are air tight, (no grit under the seal).
C. Be sure that the jars are placed in the light, (not direct sun).

Tomato Transplant Test
Transplant five to 10 succulent, fast growing tomato seedlings into fumigated beds (approximately 4-6 inches deep). Do the same in a non-fumigated area (i.e., between rows). If there is variation in the field, plant into the heaviest, wettest soils. Inspect the seedlings in two days for wilting or "root burn". If plants in the fumigated zone look the same as those outside the fumigated zone, it is safe to plant.

Which Test is Best?
Both the lettuce seed and tomato transplant tests should serve the purpose. The response of tomato seedlings vary somewhat depending on how succulent they are, the relative humidity, soil moisture and temperature. Relative differences between plants in fumigated and unfumigated areas are key to detecting low level residues. High concentrations should produce clear cut symptoms.
Lettuce seed tested in jars are not subjected to the variations in the field which can affect the response of tomato transplants. However, the process of collecting a soil sample allows some fumigant to escape prior to sealing the jar. In addition, excess soil moisture can inhibit normal lettuce seed germination reducing the sensitivity of the test.

USES, RATES AND APPLICATION METHODS

Field Application Where Entire Area Is Being Treated
Soil Injection:
Apply with injectors (shanks, blades, fertilizer wheels, plows, etc.)
NEMASOL 42% may be applied using injector blades spaced no more than 6 inches apart and set to run at a depth of 6 to 14 inches in the soil. Or alternatively NEMASOL 42% may be applied using a double winged shank with spray nozzles spaced no more than 9 inches apart horizontally and spaced close enough vertically for uniform coverage. When setting up your soil injection equipment with either spray blades injection knifes or coulters make sure they are evenly and closely placed to create an even application width and depth. To accomplish this it may require multiple toolbars with the injection tools staggered. This will help prevent buildup of trash and aid in the soil sealing.
Regardless of which application method used you must use 30-75 gallons of NEMASOL 42% per acre. This application should be followed immediately by a roller/packer to smooth and compact the soil surface. When Spring applying NEMASOL 42% with injector blades such as the "Noble Plow" blade the following precautions should be followed:

- Apply all fertilizers after the NEMASOL 42% application.
- Thoroughly aerate the soil 7 days after the NEMASOL 42% application by plowing, shallow ripping or disking, or combination thereof to allow the odor to dissipate.
- Planting may take place 14-21 days after the NEMASOL 42% application provided no NEMASOL 42% odor is noticeable at the time of planting.
- If odor is noticeable at planting, rework the soil.
- If soil temperatures are below 60°F at planting, delay planting a minimum of 21 days from the day of the NEMASOL 42% application regardless of any other precautions that may have been taken.

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In addition to waiting 21 days from application, set indicator plants (such as tomatoes) in various places in the treated field with a "hot cap" left undisturbed for a minimum of 24 hours to be sure all of the NEMASOL 42% has left the soil.

SOIL COVERING:
NEMASOL 42% may be applied as a broadcast application immediately in front of soil covering equipment such as bed shapers, rotary tillers, disks, etc., to a minimum depth of 6 inches using a single pass to incorporate. Use 30-75 gallons of NEMASOL 42% per acre followed immediately by a roller/packer to smooth and compact the soil surface.

Rotary Tiller or Power Mulcher:
Spray dilute NEMASOL 42% immediately in front of tiller or mulcher. Use 30 to 75 gallons per treated acre. Follow immediately with a roller or bedshaper, or similar device, or cover with an adequate amount of soil to seal the fumigant into the soil. Light watering or tarping after rolling or bed shaping helps prevent the escape of gas.

Disk Applied Method:
Spray dilute NEMASOL 42% immediately in front of disc. Use 30 to 75 gallons per treated acre. Follow immediately with a roller to smooth and compact the soil surface. Light watering or rolling helps prevent gas escape.

Sprinkler System:
Use only sprinkler systems which give large water droplets to prevent excessive loss. Use 30 to 75 gallons of NEMASOL 42% per treated acre in a minimum of one acre inch of water. Meter continuously into the irrigation system throughout the entire application period. At completion of application, flush the system with only enough water to clear the lines. If soil surface dried quickly, reseal it by running sprinklers for 20 minutes once a day for the next day or two. On very light soils, keep surface moist by sprinkling for 2 or 3 days.
Follow use precautions in "GENERAL PRECAUTIONS FOR IRRIGATION SYSTEMS" section above.

Application Over Cover Crops
NEMASOL 42% can be applied through sprinkler irrigation systems over cover crops such as alfalfa, clover, and grasses such as Rye, Oats, Wheat and Sudan. When applied over cover crops, on sandy (coarse) soils NEMASOL 42% may be applied to crop stubble or vegetation. When compaction exists in the soil profile to be treated, use chisel or ripper to remove compaction prior to application.

Effect of Air Temperature and Winds on Sprinkler Applications
When using the sprinkler application method, apply NEMASOL 42% only when the air temperature is below 90°F. This precaution is recommended to guard against evaporation of the product. Low humidity or high winds can also cause evaporation of the product before it can be drenched into the soil. Do not apply when wind conditions favor drift from treated field.

Check, Flood (Basin) Furrow and Border
Meter NEMASOL 42% at a steady rate into water during irrigation. Depending on the kind of pest and the treatment depth desired, use 30 to 75 gallons per treated acre in 3 to 18 inches of water per acre. Meter the product into the water at the head of the field.
Follow use precautions in "GENERAL PRECAUTIONS FOR IRRIGATION SYSTEMS" section above.

Runoff of Treatment Solutions
To prevent runoff of the treatment solution, do not apply the solution at a rate greater than the absorption capacity of the field. Should runoff occur, isolate it from growing crops and water sources. Once collected, reapply it to the treated field.

FIELD APPLICATION TO BEDS OR ROWS

SOIL INJECTIONS: NEMASOL 42% may be injected into pre-formed plant beds. Space 2 or more shanks at intervals of no more than 5 inches to cover the desired treating width. Use thin injection shank(s) and inject NEMASOL 42%, 4 inches deep into well prepared soil. Follow immediately with a roller to seal chisel channel(s). Light watering or a tarp after rolling helps to prevent gas escape. Apply 30 to 75 gallons per treated acre. To determine rate see section under drip irrigation: Method of Determining Fluid Ounces/100 Feet of Linear Row. If NEMASOL 42% is injected into established plant beds through plastic tarps to terminate growth of a previous crop, and to fumigate the bed in preparation of planting a subsequent crop, the terminated crop must not be used for any food or feed purposes after NEMASOL 42% has been applied.

SOIL COVERING METHOD (Bed-over methods): NEMASOL 42% may be sprayed or dripped in a bed wide band onto the soil immediately ahead of bedshaping equipment. Cover the NEMASOL 42% with soil to a depth of 3 to 6 inches. The soil should be rolled and compacted immediately. Apply at the rate of 30 to 75 gallons per acre of treated soil.
Apply 30 to 75 gallons per treated acre. To determine rate see section under drip irrigation; Method of Determining Fluid Ounces/100 Feet of Linear Row.

ROTARY TILLER or POWER MULCHER: Inject NEMASOL 42% immediately in front of the tiller or mulcher. Use 30 to 75 gallons per treated acre. Follow immediately with a roller, bed shaper, or similar device, or cover with an adequate amount of soil to seal the fumigant into the soil. Light watering or a tarp after rolling helps to prevent gas escape.

DRIP IRRIGATION SYSTEM

Drip irrigation systems must meet the requirements listed for sprinkler chemigation systems.
NEMASOL 42% must be applied through a drip irrigation system to wet the soil thoroughly in the area being treated. Meter 30 to 57 gallons NEMASOL 42% per treated acre into the drip system during the entire irrigation period. APPLICATION MUST BE CONTINUOUSLY SUPERVISED. THIS IS VERY IMPORTANT: AN ADEQUATE CONCENTRATION OF NEMASOL 42% MUST BE PRESENT AT THE TIME OF WEED SEED GERMINATION IN ORDER TO BE EFFECTIVE. Further directions for use are as follows: (1). Ground must be in seed-bed condition, no clods larger than ½" in diameter. (2). Beds must be listed, shaped and ready for planting. (3). Soil moisture must be 50% of field capacity in the top 2-3" at time of application.

METHOD OF DETERMINING FLUID OUNCES/100 FEET OF LINEAR ROW
1) Determine width of bed in feet by dividing the width of bed in inches by 12. Example: 5" bed = 5" divided by 12 = 0.4166 feet
2) Determine square feet in 100 linear feet of bed by multiplying the width of the bed by 100. Example: 0.4166 ft. x 100 ft. = 41.66 sq. ft.
3) Determine the treated acres per 100 linear feet of bed by dividing the sq. ft. by 43,560 (sq. ft. in acre). Example: 41.66 sq. ft. divided by 43,560 = 0.00096 acre.
4) To determine the fluid ounces per 100 linear ft.
   a) 1 gal. = 128 fl. oz; 50 gals. = 6400 fl. oz; 75 gals. = 9600 fl. oz.
   b) multiply fluid ounces by acres. Example: 50 gals. = 6400 fl. oz. x 0.00096 = 6.14 fl. oz. per 100 linear feet row.

ADDITIONAL RECOMMENDATIONS

SEED TREATMENT
A suitable fungicide should be used to treat all crop seed being planted into the treated soil.

PEANUTS
For suppression of Cylindrocladium Black Rot (CBR) and nematodes, apply NEMASOL 42% at the rate of 7.5 gallons per acre (6.61 fluid ounces per 100 lineral feet of row).
Use with partially resistant cultivars (NC-10C or others as designated by your local Agricultural Extension Service) in cases of severe disease pressure. Plant other varieties only in cases of light CBR pressure.

Soil Preparations:
Before applying NEMASOL 42%, all residue from the previous crop should be decomposed (enhance by fall disking) and plowed under in the Spring with a moldboard plow. Soil incorporated preplant herbicides must be applied prior to the application of NEMASOL 42%.

Application:
Apply 8 to 10 inches below seed placement with injector shank or coulter type applicator placed in front of a bedshaper to mark rows. Soil temperatures must be in the range of 60°F to 90°F at a 3 inch depth at time of treatment.

Tillage and Planting After Application
Do not mix untreated soil with treated soil by tillage or other cultural practices. Plant the peanuts in the center of the treated beds no earlier than 14 days following the application of NEMASOL 42%. At planting Nematocide treatment will be necessary in fields with heavy infestations of root knot, ring and/or Sting Nematodes.

PEPPERMINT:
Verticillium Wilt: When infestation is limited to small spots in a field, the spread of Verticillium can be reduced by treating the infected spots. Apply at the rate of up to 75 gallons of NEMASOL 42% per treated acre using injector blade or thin shank injector rig. Follow directions for "FIELD APPLICATION - WHERE ENTIRE AREA IS BEING TREATED."

POTATOES

For suppression of potato pests such as Nematodes, Weed Seeds and Verticillium dahliae. (Early Maturity Disease).

SOIL INJECTION: Apply a minimum of 30 gallons per acre of NEMASOL 42%. Follow directions for FIELD APPLICATION WHERE ENTIRE AREA IS TREATED.

Sprinkler System Preplant Applications:
Apply 30 to 75 gallons of NEMASOL 42% per treated acre in sufficient water to penetrate to the desired treatment depth. Meter continuously into the irrigation system throughout the entire application period. Soil temperature should be in the range of 40°F to 90°F in the treatment zone. Soil moisture immediately prior to treatment must be 50% to 80% of field capacity down to the 24 inch level. Soil condition must facilitate even water penetration without runoff.

NOTE:
1. NEMASOL 42% may be applied where a crop stubble or vegetation exists without prior tillage, provided there is adequate penetration of the product.
2. NEMASOL 42% will suppress root knot nematodes in the treatment zone at the time of treatment. The treatment zone is defined as the depth of penetration that NEMASOL 42% achieves at the time of application. If high numbers or deep nematodes are identified, anticipate nematodes to build up throughout the growing season. Some damage may occur unless additional action is taken. NEMASOL 42% has no residual activity and reinfestation of a treated field can occur from numerous sources such as deep nematode populations, seed pieces, irrigation water, equipment contamination and blowing wind.

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Early Maturity Disease of Potatoes:
Apply 30 to 75 gallons NEMASOL 42% per treated acre using the soil-injection or soil covering method as described in the "FIELD APPLICATION WHERE ENTIRE AREA IS BEING TREATED" section.

Sequential Application of NEMASOL 42% and Telone II
For suppression of Verticillium Dahliae, Root Knot and Lesion Nematodes in soils to be planted to Potatoes.

The following use directions provide information for a sequential treatment program of applications of Telone II soil fumigant and NEMASOL 42% soil fumigant. For best results, apply both Telone II and NEMASOL 42% in the fall. Alternative treatment schedules include a fall application of Telone II followed by a spring application of NEMASOL 42%, a fall application of NEMASOL 42% followed by a spring application of Telone II, or a spring application of both products. Due to time constraints *resulting from varying weather conditions, a spring application may result in* delayed planting.

Application Directions for Telone II
Soil conditions at the time of application of Telone II that allow rapid diffusion of the fumigant as a gas through the soil normally give best results. Compacted soil layers within the desired treatment zone must be fractured before or during application of the fumigant. Soil temperature must be between 40 and 80 degrees Fahrenheit at the depth of injection, moist from two inches below the soil surface to at least 12 inches deep as determined by the feel method, free of clods, and with crop residue thoroughly incorporated into the soil at least at the time of application and sealing.
Apply Telone II as a broadcast treatment at a minimum rate of 15 gallons per acre (44.3 fl. oz/1000 feet of row/outlet based on 12 inch centers) using either chisel (shank), noble (sweep) or modified ParaTill application equipment. Chisel equipment must have ripper-type shanks. ParaTill equipment must be modifed so that outlet spacing is evenly distributed under the tool bar. With chisel and ParaTill *equipment, a shank spacing of 12-24 inches is recommended. Do not exceed a* shank spacing of 24 inches. Outlet depth should be at least 18 inches below the final soil surface. Nobel plow outlet spacing should not exceed 12 inches and application should be made to a depth of at least 15 inches. Fumigant penetration may be limited if a plow pan exists below the depth of the noble blade. Do not use plow sole application. Immediately after application of Telone II, use a disc, paddle-wheel *or similar device to uniformly mix the top 4-6 inches of soil to effectively eliminate* chisel traces. Then follow immediately with a ring roller or cultipacker to seal the soil surface. Little or no crop residue should be exposed at the surface following the sealing operation. Any remaining crop residue should lie flat following sealing. Following application and sealing, leave soil undisturbed for 7-14 days. The long undisturbed interval may be necessary if the soil is or become cold or wet during this period.

APPLICATION directions for NEMASOL 42%
Soil conditions at the time of application of NEMASOL 42% must be between 40 and 90 degrees Fahrenheit in the treated zone, and at 50-85% field capacity. If necessary, pre-irrigate about a week prior to treatment to adjust soil moisture to desired levels. Immediately before application, cultivate lightly if the soil has crusted.
Apply NEMASOL 42% either by chemigation or by soil injection or surface incorporation as a sequential application with Telone II. When NEMASOL 42% is used *prior to Telone II, allow a minimum of 7 days between treatments. When NEMASOL* 42% is applied after Telone II, allow a minimum of 7 days before disturbing the soil or beginning any pre-irrigation for the application of NEMASOL 42%.
For chemigation, apply NEMASOL 42% at the minimum rate of 30 gallons per acre in a minimum of .05 acre-inch of water to the desired depth of treatment. Heavier soils may require the higher amount of water. Use only those sprinkler systems with give large water droplets to prevent excessive fumigant loss. Do not apply when *wind speed favors drift beyond the area intended for treatment or when conditions* of thermal inversion exists. If for any reason chemigation is interrupted prior to completion (e.g., excessive wind, equipment malfunction, etc.,), back the system up prior to restarting to ensure full application to the area affected prior to shutting down the system and to allow full distribution of the NEMASOL 42% solution throughout the irrigation system prior to moving over untreated soil. After application is completed, flush equipment until all NEMASOL 42% is eliminated from the system. Follow all application directions described in the "General Precautions for Irrigation Systems" and "Sprinkler Chemigation System" sections in the EPA registered label for NEMASOL 42%.
For soil injection, apply NEMASOL 42% at the minimum rate of 30 gallons per acre using shanks, sweep blades or double winged shanks. Single shanks should be *spaced no more than 6 inches apart with either single injection outlets no more than* 6 inches deep or dual injection outlets spaced at 6 and 12 inches deep. Single sweep blades should be spaced no more than 12 inches apart with sweeps 12 inches wide and a spray nozzle that will provide broadcast coverage from sweep tip to sweep tip. Double-winged shanks should be spaced no more than 12 inches apart with no more than 9 inches between adjacent wings and with spray nozzles that provide uniform coverage. The Noble Plow blade should have spray nozzles spaced 6 inches apart to give uniform coverage, an injection depth set to 12 to 14 inches deep, and be combined with a surface application using a disk to immediately incorporate the NEMASOL 42% placed on the surface. Follow all the above applications immediately with a roller/packet to smooth and compact the soil surface.
For surface incorporation, apply NEMASOL 42% at the minimum rate of 30 gallons per acre as a broadcast application to the soil surface immediately in front of soil covering equipment such as rotary tillers, disks, etc., set to a minimum depth of 6 inches using a single-pass incorporation followed immediately by a roller/packer to smooth and compact the soil surface.

Soil Fumigation Interval
Planting may take place only after the odors of either Telone II or NEMASOL 42% are no longer present within the zone of fumigation. If NEMASOL 42% follows Telone II and is applied in the spring with the Noble Plow blade, apply all fertilizers after the application of NEMASOL 42%. Thoroughly aerate the soil 5 to 7 days after the application of NEMASOL 42% by shallow plowing and/or disking to allow the fumigant odors to dissipate. Wait 14-21 days after the application of NEMASOL *42% before planting the crop. Use the 21-day interval if soil temperatures are below* 60 degrees Fahrenheit regardless of any other precautions that may have been taken. In addition to waiting 21 days, place indicator plants (e.g., potted tomato seedlings) in various places in the treated field and cover the plants with a "hot cap", plastic sheeting, bucket, etc., to trap and confine any fumes present. Leave the plants undisturbed for a minimum of 24 hours then examine for injury before *planting the crop. Do not plant the crop if injury to indicator plants is observed.* If noxious fumes are noticeable at planting, rework the soil. If Telone II follows NEMASOL 42% and is applied in the spring, wait at least one week for each 10 gallons of Telone II applied beyond the initial undisturbed period before planting the crop. If fumigant odors are present at planting, thoroughly aerate the soil following shallow ripping and/or disking to allow fumigant odors to dissipate. Do not till the soil so deep as to move untreated soil from below the treated zone into the treated soil.

Simultaneous Application of NEMASOL 42% and Telone II
For suppression of Verticillium Dahliae, Root Knot and Lesion nematodes in soils to be planted to potatoes.

The following use directions provide information for a simultaneous ground application of Telone II soil fumigant and NEMASOL 42% soil fumigant. For best res[ults] *a fall application is recommended. Due to time constraints resulting from var[ying] weather conditions, a spring application may result in delayed planting.*

NOTE: When Telone II and NEMASOL 42% are applied simultaneously, the most restrictive personal protective equipment, worker notification and reentry restrictions specified on labels for each product must be followed.

Soil Conditions
Soil temperature must be between 40 and 80 degrees Fahrenheit in the treated zone.
Soil moisture in the top 12 inches should be at 50 to 85% of field capacity. Soil *moisture below 12 inches should be moist as determined by the feel method. If* necessary, pre-irrigate about a week prior to treatment to adjust soil moisture to the desired levels.

Application Methods and Equipment
Use a dual equipment setup to apply Telone II and NEMASOL 42% during a single pass. Calibrate equipment for simultaneous application of each product. Because of more shallow product placement and the need to disrupt chisel traces from application of Telone II, mount equipment for application of NEMASOL 42% behind that of Telone II.

Apply Telone II as a broadcast treatment at a minimum rate of 15 gallons per acre (44.3 fl. oz/1000 feet of row/outlet based on 12 inch centers) using either chisel (shank), noble (sweep) or modified ParaTill application equipment. Chisel equip*ment must have ripper-type shanks. ParaTill equipment must be modified so* outlet spacing is evenly distributed under the tool bar. With chisel and Pa[raTill] equipment, a shank spacing of 12-24 inches is recommended. Do not exceed a shank spacing of 24 inches. Outlet depth should be at least 18 inches below the final soil surface. Nobel plow outlet spacing should not exceed 12 inches and application should be made to a depth of at least 15 inches. Fumigant penetration may *be limited if a plow pan exists below the depth of the noble blade. Do not use plow* sole application.

For soil injection, apply NEMASOL 42% as a broadcast treatment at a minimum *rate of 30 gallons per acre using shanks, sweep blades or double winged shanks.* Single shanks should be spaced no more than 6 inches apart with either single injection outlets no more than 6 inches deep or dual injection outlets spaced at 6 and 12 inches deep. Single sweep blades should be spaced no more than 12 inches apart with sweeps 12 inches wide and a spray nozzle that will provide broadcast coverage from sweep tip to sweep tip. Double-winged shanks should be spaced no more than 12 inches apart with no more than 9 inches between adjacent wings and with spray nozzles that provide uniform coverage.

For surface incorporation, apply NEMASOL 42% at the minimum rate of 30 gallons per acre as a broadcast application to the soil surface immediately in front of soil covering equipment such as rotary tillers, disks, etc., set to a minimum depth of 6 inches.

Sealing the Soil After Application
Immediately after application the soil must be sealed to prevent fumigant loss and ensure that an effective concentration of fumigant is maintained within the soil. Chisel traces resulting from the Telone II application must be disrupted to a depth of at least 4 to 6 inches. This may be accomplished with the NEMASOL 42% applicator or with a disk or similar device.
As a final step to compact the soil surface and help maximize soil sealing, all above applications must be followed with a ring roller or cultipacker.

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Soil Fumigation Interval

Planting may take place only after the odors of both Telone II and NEMASOL 42% are no longer present. Following application and sealing leave the soil undisturbed for 7-10 days. The longer undisturbed interval may be necessary if the soil is or becomes cold or wet during this period. For spring applications, thoroughly aerate the soil, after the initial undisturbed interval, by shallow plowing and/or disking to allow the fumigant odors to dissipate. Allow 21 days prior to planting. In addition to waiting 21 days, place indicator plants (e.g., potted tomato seedlings) in various places in the treated field and cover the plants with a "hot cap", plastic sheeting, bucket, etc., to trap and confine any fumes present. Leave the plants undisturbed for a minimum of 24 hours then examine for injury before planting the crop. Do not plant the crop if injury to indicator plants is observed. If noxious fumes are noticeable at planting, rework the soil.

Special Considerations and Precautions

- Use of this simultaneous application program of reduced rates of Telone II and NEMASOL 42% does not guarantee pest-free potatoes at harvest.
- Use of Telone II and NEMASOL 42% according to these use directions will suppress root knot and lesion nematode populations present within the fumigated zone at the time of fumigation. The fumigated zone can vary depending upon a number of factors such as fumigant rate, application methods used, depth of fumigant application, soil moisture, soil type, soil temperature and soil tilth (including soil compaction and soil porosity). The simultaneous combination of reduced rates of Telone II and NEMASOL 42% will not suppress or prevent reinfestation subsequent to the treatment. Subsequent pest populations may infest the fumigated zone from irrigation water, equipment, potato seed and other sources of contamination, or may invade the fumigated zone from surrounding untreated soil such as from beneath the fumigated zone or from within unfumigated pockets within the fumigated zone.
- In fields with a history of severe Columbia root knot nematode problems, the maximum Federal label rate of 20 gallons of Telone II per acre is recommended in simultaneous combination with a minimum of 37.5 gallons of NEMASOL 42% per acre, per these label directions.
- With fall applications, a cover crop such as wheat or grass may be planted following the undisturbed soil interval associated with this application to reduce the potential for over winter soil erosion.
- Refer to the product labels affixed to the containers for both Telone II and NEMASOL 42% for further recommendations and precautions for optimum fumigant performance. Within the range of recommended soil conditions, product performance can be expected to improve as the soil conditions move towards optimum. Use of this simultaneous application program of Telone II and NEMASOL 42% under soil conditions outside the recommended range of soil conditions can be expected to yield less than satisfactory performance.

TREATMENT OF TREE REPLANT SITES

After removing dead or diseased trees and as much of the root system as possible, make a shallow basin over the planting site. Add NEMASOL 42% to the stream of water while filling the basin. Use 1¼ pts. NEMASOL 42% per 100 sq. ft. in sufficient water (depending on soil type) to penetrate at least 6 ft. For suppression of Oak Root Fungus, use a basin at least 20 ft. square. Increase dosage to 3 pts. per 100 sq. ft. in sufficient water to penetrate to the depth of the root system. If water is tanked to the planting site, add NEMASOL 42% to the water and mix before filling the basin. Tarping of replant sites is required when near (½ mile) to populated areas such as schools, hospitals, commercial or office buildings, factories, residential areas etc. Tarping is not required if treatment is further than ½ mile from such populated areas.

FOR TREATMENT OF SPECIFIC REPLANT DISEASES (SRD) IN FRUIT ORCHARDS

NEMASOL 42% may be applied to prepared or unprepared sites as a coarse spray treatment in a band using standard tractor spray application equipment. Use 56.25 to 75 gallons of NEMASOL 42% per treated acre. Apply irrigation water while spray application is taking place and continue until enough water has been applied to drive the NEMASOL 42% to the minimum depth of two feet. Depending on the kind of pest and the treatment depth desired, apply in sufficient water to wet the soil to the desired depth of treatment. Follow guidelines for "RUNOFF OF TREATMENT SOLUTIONS" section. The soil moisture should be at 30% or higher field capacity at the time of application. Because NEMASOL 42% is harmful to living plants, an appropriate interval must be observed between soil fumigation and planting. Planting can only begin 21 days (minimum) after treatment. Harvest of any fruit within one year of treatment is prohibited.

SYMPHYLID SUPPRESSION

Soil should be in good bed condition to a depth of 8 to 10 inches. Maintain adequate soil moisture during the spring season to bring symphylids to the upper soil surface. Treat during July-August when symphylids are in the upper soil surface. Apply a minimum of 15 gallons of NEMASOL 42% per acre (0.3 pints per 100 sq. ft. of treated soil) using blade or thin blade chisel injectors spaced 5 inches apart. Inject below the level of Symphylid concentration, usually 6 to 8 inches. Pack soil immediately after the application.

TOBACCO PLANT BEDS

Fall applications are recommended whenever possible. Read and follow the use directions carefully. Treatment in the South should generally be made before November 30.

TARP METHOD - Prepare the bed 5 to 7 days before application to ensure best conditions for weed seed germination and fumigant action of NEMASOL 42%. The bed should be free of clods, level and in good tilth. Apply 30 to 75 gallons per treated acre of NEMASOL 42% in sufficient water to wet the soil to the desired depth of treatment. Apply uniformly over the entire bed. Cover the bed immediately with plastic cover. Keep covered no less than one day but no more than two days. The cover need not be tented, but should be secure to prevent wind from uncovering the treated area. Seven days after date of application, loosen the treated soil to a depth of 2 inches. Do not seed tobacco earlier than 21 days after the NEMASOL 42% application.

DRENCH METHOD - Apply 1.875 gallons of NEMASOL 42% in 150 to 200 gallons of water per 100 sq. yds. Application may be made with sprinklers, sprayers with nozzles or any suitable equipment. Follow DIRECTIONS given previously for Field Applications - Where Entire Area is Being Treated.

NOTICE

IT IS IMPOSSIBLE TO ELIMINATE ALL RISKS INHERENTLY ASSOCIATED WITH THE USE OF THIS PRODUCT. CROP INJURY, INEFFECTIVENESS, OR OTHER UNINTENDED CONSEQUENCES MAY RESULT BECAUSE OF SUCH FACTORS AS WEATHER CONDITIONS, PRESENCE OF OTHER MATERIALS, OR THE MANNER OF USE OR APPLICATION, ALL OF WHICH ARE BEYOND THE CONTROL OF PLATTE, THE MANUFACTURER OR SELLER. IN NO CASE SHALL PLATTE, THE MANUFACTURER OR SELLER BE LIABLE FOR CONSEQUENTIAL, SPECIAL OR INDIRECT DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT. ALL SUCH RISKS SHALL BE ASSUMED BY THE BUYER.

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ACCEPTED
12/21/98
Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the pesticide registered under EPA Reg. No. 34704-769

FORMULATED BY
PLATTE CHEMICAL CO.
150 SO. MAIN STREET FREMONT, NEBRASKA 68025-5697