# FUMAZONE\* 86E

#### SYMPHYLAN CONTROL

To control symphylans use only overall applications at the dosages recommended in the table. Apply during late summer or early fall when the soil is warm.

Bacterial Canker and Decline of Peach Trees: Use as a postplant treatment on light (sandy) soil. Apply FUMAZONE 86E either by overall (chisel) application at the rate of 3.5 gallons per acre or by (flood) irrigation application using 5 to 6 inches of water. Use the irrigation treatment every two years after planting. Application by both methods should be made after harvest and before leaf fall.

	Application		Dosage (a)	
Crops <sup>+</sup>	Time	Туре	Gallons Per Acre	Fl. Oz./1000 ft. Row Per Chisel
Vegetables: Broccoli, brussels	Preplant	Overall (b)		
sprouts, cabbage, cauliflower, carrots, celery, egg plant, endive (escarole), lettuce, okra, parsnips, radishes, snapbeans (c)	Preplant At Planting Postplant (e)	Row ( <b>d</b> )	1.5 to 2.0	4.4 to 5.9
Cucurbits: Melons,	Preplant	Overall ( <b>b</b> )		
cucumbers, and summer squash	Preplant At Planting	Row (d)	1.5 to 2.0	4.4 to9
Lima beans: (p)	Preplant	Overall ( <b>b</b> )	1.0 to 1.7	2.9 to 5.0
	At Planting	Row (d)		
	Preplant	Overall (b)		
Direct Seeded		Row (d)		
Tomatoes: Transplants	At Planting Postplant (e)	Row ( <b>d</b> )	1.0 to 1.5	2.9 to 4.4
	Preplant	Overall ( <b>b</b> )		
		Row (d)		
	Postplant	Row (d)	1.0	2.9
Soybeans: (p) Southeastern States Only (r)	Preplant At Planting	Row ( <b>q</b> )	0.5 to 1.0 (42″ row)	5.1 to 10.3
	Preplant	Row ( <b>d</b> )	1.0 to 2.0	2.9 to 5.9
Cotton:	Postplant	Irrigation		
	At Planting	Row (d)		
	Preplant	Overall (b)	1.5 to 7.0	4.4 to 20.6
Bananas:	At Planting (t)	Row ( <b>d</b> )		
	Postplant (f)	Row ( <b>d</b> )	1.5 to 4.5	4.4 to 13.2
		Irrigation	1.5	
	Preplant	Row (d)	3.0 to 11.0 8.8 to 32.	
Pineapple:	Postplant ( <b>g</b> )	Irrigation ( <b>h</b> )		8.8 to 32.3
	At Planting	• Row ( <b>d</b> )		
Berries: Blackberries, boysen	Preplant	Overall (b)		
berries, dewberries,		Row (d)		
loganberries, raspberries and strawberries (j)	At Planting	Row (d)	2.0 5.9	5.9
monderies (I)	Postplant (i)	Row (d)		
	<b> </b>	Irrigation		
	Preplant	Overall		
Citrus Fruit (k): Grapefruit, lemons, limes, oranges,		<u>Row (d)</u>	20. 70	0 0 1 00 4
tangerines.	At Planting	Row (d)	3.0 to 7.0	8.8 to 20.6
	Postplant	<u>Row (d)</u>		

#### DOSAGE AND USE RECOMMENDATIONS



## EMULSIFIABLE NEMATO SOIL FUMIGANT FOR CONTROLLING SOIL-

Jse dosages in the lower range in light ndy soil and dosages in the higher nge on heavier mineral soil or where eper penetration is desired. Do not ceed maximum dosage per acre in a ngle year.

Overall application may be mude by ection, spray-incorporation or irrigaon methods. Consult label under "Over-Application" for detailed directions. Do not feed food plant remains to dairy ttle or animals being finished for ughter.

or row applications where 2 or more isels are used per row apply at the same te per chisel as for overall. As the disnce between rows is increased, the nount of fumigant applied per acre will ecrease and vise versa. For crop plantg see label directions under "Planting" structions with Row Applications."

Aake the postplant application as soon the plants become firmly established. Do not apply more than once in each to 12 month period following initial oplication.

Do not apply within 9 months of harvest

Apply in about <sup>1</sup>10 inch of irrigation iter

wo postplant applications are recomended; the first as soon as the plants come established, the second 4 to 6 eks later. Note: Do not treat any of the amble fruits within 48 days of harvest. Do not apply within 55 days of harvest.

Apply no more often than once each 3 ars.

Do not apply within 30 days of harvest. o not use more than 5 gallons per acre 4.7 fl. oz. per 1,000 feet row per chisel). Do not apply within 30 days of harvest.

Before application, to determine tolernt and moderately tolerant species, con-It manufacture's literature, "FUMA-ONE\* NEMATICIDE - A Check List for



#### **KEEP OUT OF REACH OF CH** AND VAPOR • MAY BE SWALLOWED • ABSORBED MAY CAUSE SKIN IRRITATIO CAUSES IRRITATION OF E COMBU

Do not take internally • Do not get in eye vapor • Keep container closed • Use only POUR, SPILL, OR STORE NEAR HEAT OR C and feedstuff • Keep children and pets ( been washed into soil • Wash thorough and before eating and smoking.

In case of contact, immediately remove contam soap and water; flush eyes with plenty of wa attention. Do not wear shoes or clothing until Al results from inhalation, remove to fresh air a Induce vomiting by giving an emetic such as 2 water.

In case of spills or use in a confined area have d with a fresh black canister meeting specificat vapors, a full face self-contained breathing a

#### USE PREC

Important - Note Carefully: Fumigation may te and of soluble salts in the soil. This is most like fumigant are applied to soils that are cold, wet to roots of ammonia sensitive plants, fertilize as To avoid ammonia injury or nitrate starvation, ( monium salts, and use only fertilizers containing and the soil temperature is above 65°F. Certa tolerant to ammonia; the above rule does not fumigation stimulates nitrification and may red To avoid reinfestation of treated soil, do not u

be contaminated with soil-borne pests. If foliage of plants is contacted by the fumigan

FUMAZONE 86E is not recommended for use of

Do not use containers, pumps or other transfer magnesium or their alloys, as under certain co rosive to such metals.

Store in tightly closed containers in a cool pl

and summer squash	At Planting	Row (d)		
na beans: (p)	Preplant	Overall (b)	1.0 to 1.7	2.9 to 5.0
	At Planting	Row (d)		
	Preplant	Overall (b)		
Direct Seeded	riepidin	Row (d)		
	At Planting Postplant (e)	Row ( <b>d</b> )	1.0 to 1.5	2.9 to 4.4
matbes:		Overall ( <b>b</b> )		
Transplants	Preplant	Row (d)		
	Postplant	Row (d)	1.0	2.9
beans: (p) outheastern States Only (r)	Preplant At Planting	Row ( <b>q</b> )	0.5 to 1.0 (42 row)	5.1 to 10.3
	Preplant	Row (d)		
tton:	Postplant	Irrigation	1.0 to 2.0	2.9 to 5.9
	At Planting	Row (d)		
	Preplant	Overali (b)	1.5 to 7.0	4.4 to 20.6
inanas:	At Planting (t)			
	Postplant (f)	Row (d)	1.5 to 4.5	4.4 to 13.2
		Irrigation	1.5	
	Preplant	Row (d)		
neapple:	Postplant (g)	Irrigation ( <b>h</b> )	3.0 to 11.0	8.8 to 32.3
	At Planting	<sup>.</sup> Row ( <b>d</b> )		
ries: Blackberries, boysen.	Preplant	Overall (b)		
erries, dewberries,		Row ( <b>d</b> )	2.0	
oganberries, raspberries and	At Planting	Row ( <b>d</b> )		5.9
trawberries (j)	Postplant (i)	Row ( <b>d</b> )		
		Irrigation		
	Preplant	Overall		
rus Fruit (k): Grapefruit,		<u>Row (d)</u>		
emons, limes, oranges, angerines.	At Planting	Row (d)	3.0 to 7.0	8.8 to 20.6
sige inter	Postplant	Row (d)		
		Irrigation		
duous Fruit and Nuts:	Preplant	Overall (b)		
pricots, cherries (1, k), figs (1),		Row (d)	3.0 to 7.0	8.8 to 20.6
rapes, nectarines, peaches, lums (prunes) <b>(l,k),</b> almonds	At Planting	Row (d)	J.U 10 /.U	0.0 10 20.0
n), English walnuts (m).	Postplant	Row (d)		
	<b>}</b>	Irrigation Overall (b)		
	Preplant	Row (d)		
namentals: Flowers, shrubs,	At Planting	Row (d)	3.0	8.8
ees, etc. Tolerant species (n)		Row (d)	5.0	0.0
	Postplant	Irrigation		
	<b>+</b>	Overall (b)		
	Preplant	Row (d)	1.5	
Moderately Tolerant species (n)	At Planting	Row (d)		4.4
		Row (d)	1.5	
	Postplant	1rrigation		
	Preplant	Overali (b)	3.0	8.8
f:		Overall (b)		) 8.8 to 20.6
	Postplant	Drench (o)	3.0 to 7.0	
	<u> </u>	Overall (b)		
	Preplant	Row (d)	1.4 to 2.1 4.1 to 6.	4.1 to 6.2
anuts:(s)	1			

+ Any forage crops grown on soil treated with a bramide containing fumigant should not be used as a feed for dairy animals, or animals being finished for slaughter, until 2 years after row treatments and 3 years following overall treatments.

#### Application" for detailed directions.

o not feed food plant remains to dairy le or animals being finished for ughter.

r row applications where 2 or more els are used per row apply at the same e per chisel as for overall. As the disce between rows is increased, the bunt of fumigant applied per acre will rease and vise versa. For crop plantsee label directions under "Planting ructions with Row Applications."

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o not apply within 9 months of harvest.

pply in about <sup>3/</sup>10 inch of irrigation

vo postplant applications are recomnded; the first as soon as the plants come established, the second 4 to 6 eks later. Note: Do not treat any of the imble fruits within 48 days of harvest. o not apply within 55 days of harvest.

pply no more often than once each 3

o not apply within 30 days of harvest. not use more than 5 gallons per acre .7 fl. oz. per 1,000 feet row per chisel). o not apply within 30 days of harvest.

efore application, to determine tolerand moderately tolerant species, cont manufacture's literature, "FUMA-NE\* NEMATICIDE – A Check List for e on Ornamental Plants."

o not use more than 5.75 gallons per e on bent grasses.

bybean hay and plant remains from a beans grown on treated soil may stain bromide residues greater than se resulting from natural sources. Acdingly do not graze treated areas or d soybean hay or lima bean plant reins to meat or dairy animals. Do not such plant parts to another party or erwise introduce into commerce.

se a single chisel per row and apply the same flow rate per 1000 feet row chisel as given in table, **ragardless of v spacing**. Gallons per acre will inase as row spacing decreases and vice

a., Ark., Del., Fla., Ga., Ky., La., Md., ss., N.C., S.C., Tenn., Va. and the othern third of III. and Mo.

o not feed, sell or introduce into comrce hay or hulls taken from treated soil.

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pply 3 cc under the seed piece.

## and feedstuff • Keep children and pets of been washed into soil • Wash thoroughly and before eating and smoking.

In case of contact, immediately remove contamin soap and water; flush eyes with plenty of wate attention. Do not wear shoes or clothing until ABS results from inhalation, remove to fresh air and Induce vomiting by giving an emetic such as 2 ta water.

In case of spills or use in a confined area have ave with a fresh black canister meeting specificatio vapors, a full face self-contained breathing app

#### USE PRECA

Important -- Note Carefully: Fumigation may tem and of soluble salts in the soil. This is most likely fumigant are applied to soils that are cold, wet, c to roots of ammonia sensitive plants, fertilize as in To avoid ammonia injury or nitrate starvation, or monium salts, and use only fertilizers containing r and the soil temperature is above 65°F. Certain tolerant to ammonia; the above rule does not ap fumigation stimulates nitrification and may redu-To avoid reinfestation of treated soil, do not use

be contaminated with soil-borne pests. If foliage of plants is contacted by the fumigant,

FUMAZONE 86E is not recommended for use on a

Do not use containers, pumps or other transfer of magnesium or their alloys, as under certain conc rosive to such metals.

Store in tightly closed containers in a cool plac children. Not for use or storage in or around the This product is toxic to wildlife. Keep out of lake in treated areas may be killed. Do not apply w when weather conditions favor drift from areas t

Rinse equipment and containers and dispose of w water supplies.

Containers should be disposed by punching hole Apply this product only as specified on this lal

**NOTICE:** Seller warrants that the product conforms to the purposes stated on the label with used in accordan but neither this warranty nor any other warranty of M PURPOSE, express or implied, extends to the use of th abnormal conditions, or under conditions not reasona risk of any such use.

Patented U.S. No. 3,049,472. This product license 2,937,936 and 3,049,472.

# THE DOW CHEM

MIDLAND, MICHIGAN 48640, USA ZURIC CORAL GABLES, FLORIDA 33134, USA \* Trademark of THE DOW 86E

## EMULSIFIABLE NEMATOCIDAL CONCENTRATE

SOIL FUMIGANT FOR CONTROLLING SOIL-BORNE PLANT PARASITIC NEMATODES

I in the table. Apply during late summer or early fall

i light (sandy) soil. Apply FUMAZONE & either by tion application using 5 to 6 inches of water. Use the s should be made after harvest and before leaf fall.

#### IONS

/1000 ft. er Chisel	(a) Use dosages in the lower range in light sandy soil and dosages in the higher range on heavier mineral soil or where deeper penetration is desired. <b>Do not</b>
to 5.9	exceed maximum dosage per acre in a single year. (b) Overall application may be made by
to 5.9	injection, spray-incorporation or irriga- tion methods. Consult label under "Over- all Application" for detailed directions.
to 5.0	(c) Do not feed food plant remains to dairy cattle or animals being finished for slaughter.
to 4.4	(d) For row applications where 2 or more chisels are used per row apply at the same rate per chisel as for overall. As the dis- tance between rows is increased, the amount of fumigant applied per acre will decrease and vise versa. For crop plant- ing see label directions under "Planting Instructions with Row Applications."
2.9	(e) Make the postplant application as soon
<b>10.3</b>	as the plants become firmly established.
10 5.9	<ul> <li>(f) Do not apply more than once in each</li> <li>9 to 12 month period following initial application.</li> <li>(g) Do not apply within 9 months of harvest.</li> </ul>
o 20.6	(h) Apply in about <sup>1</sup> 10 inch of irrigation water.
lo 13.2	(i) Two postplant applications are recom- mended; the first as soon as the plants become established, the second 4 to 6 weaks later. Note: Do not tract any of the
to 32.3	weeks later. Note: Do not treat any of the bramble fruits within 48 days of harvest. (j) Do not apply within 55 days of harvest.
	(k) Apply no more often than once each 3 years.
5.9	<ul> <li>(1) Do not apply within 30 days of harvest.</li> <li>Do not use more than 5 gallons per acre (14.7 fl. oz. per 1,000 feet row per chisel).</li> <li>(m) Do not apply within 30 days of harvest.</li> </ul>
10 20.6	(n) Before application, to determine toler- art and moderately tolerant species, con- sult manufacture's literature, "FUMA- ZONE* NEMATICIDE — A Check List for

### **KEEP OUT OF REACH OF CHILDREN • HARMFUL LIQUID** AND VAPOR • MAY BE HARMFUL OR FATAL IF SWALLOWED • ABSORBED THROUGH SKIN • LIQUID **MAY CAUSE SKIN IRRITATION AND BLISTERS • VAPOR CAUSES IRRITATION OF EYES, NOSE, AND THROAT** COMBUSTIBLE

Do not take internally • Do not get in eyes, on skin or on clothing • Do not breathe vapor • Keep container closed • Use only in a well-ventilated area • DO NOT USE, POUR, SPILL, OR STORE NEAR HEAT OR OPEN FLAME • Do not contaminate food and feedstuff • Keep children and pets off treated areas until this material has been washed into soil • Wash thoroughly with soap and water after handling and before eating and smoking.

In case of contact, immediately remove contaminated shoes and clothing and wash skin with soap and water; flush eyes with plenty of water for at least 15 minutes and get medical attention. Do not wear shoes or clothing until ABSOLUTELY free of all chemical odor. If illness results from inhalation, remove to fresh air and call a doctor. If swallowed, call a doctor. Induce vomiting by giving an emetic such as 2 tablespoonfuls of table salt in a glass of warm water.

In case of spills or use in a confined area have available an approved full face mask equipped with a fresh black canister meeting specifications of the U.S. Bureau of Mines for organic vapors, a full face self-contained breathing apparatus, or full face air-supplied respirator.

#### USE PRECAUTIONS

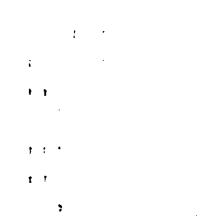
Important -- Note Carefully: Fumigation may temporarily raise the level of ammonia nitrogen and of soluble salts in the soil. This is most likely to occur when heavy rates of fertilizer and fumigant are applied to soils that are cold, wet, acid or high in organic matter. To avoid injury to roots of ammonia sensitive plants, fertilize as indicated by soil tests made after fumigation. To avoid ammonia injury or nitrate starvation, or both, avoid using fertilizers containing ammonium salts, and use only fertilizers containing nitrates until after the crop is well established and the soil temperature is above 65°F. Certain crops, including cotton and pineapple, are tolerant to ammonia; the above rule does not apply to them. Liming highly acid soils before fumigation stimulates nitrification and may reduce the possibility of ammonia toxicity. To avoid reinfestation of treated soil, do not use transplants, tools or crop residues that may be contaminated with soil-borne pests.

If foliage of plants is contacted by the fumigant, wash off immediately with water. FUMAZONE 86E is not recommended for use on extremely heavy mineral or muck soils.

Do not use containers, pumps or other transfer or application equipment made of aluminum, magnesium or their alloys, as under certain conditions FUMAZONE 86E may be severely corrosive to such metals.

Store in tightly closed containers in a cool place away from dwellings and out of reach of





	(
to 5.0	
) to 4.4	
2.9	(
<b>to</b> 10 3	
to 5 9	(
to 20.6	(
to 13.2	(
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to 20 6	(
8.8	(
4.4	(
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to 20.6	(
1 to 6.2	(

10-3.7

all Application" for detailed directions.

- (c) Do not feed food plant remains to duiry cattle or animals being finished for slaughter.
- (d) For row applications where 2 or more chisels are used per row apply at the same rate per chisel as for overall. As the distance between rows is increased, the amount of fumigant applied per acre will decrease and vise versa. For trop planting see label directions under "Planting Instructions with Row Applications."
- (e) Make the postplant application as soon as the plants become firmly established
- (f) Do not apply more than once in each 9 to 12 month period following initial application.
- (a) Do not apply within 9 months of harvest
- (h) Apply in about the inch of irrigation water
- Two postplant applications are recom mended, the first as soon as the plants become established, the second 4 to 6 weeks later. Note: Do not treat any of the bramble fruits within 48 days of harvest.
- (i) Do not apply within 55 days of harvest.
- (k) Apply no more often than once each 3 yec rs.
- (1) Do not apply within 30 days of harvest. Do not use more than 5 gallons per acre (14.7 fl. oz. per 1,000 feet rowper chisel).
- (m) Do not apply within 30 days of harvest
- (n) Before application, to determine toler ant and moderately tolerant species, con sult manufacture's literature, "FUMA ZONE\* NEMATICIDE - A Chack List for Use on Ornamental Plants."
- (o) Do not use more than 5.75 jallons per acre on bent grasses.
- (**p**) Soybean hay and plant remains from lima beans grown on treated soil may contain bromide residues gleater than those resulting from natural sources. Accordingly do not graze treated areas or feed soybean hay or lima bean plant re mains to meat or dairy animals. Do not sell such plant parts to another party or otherwise introduce into commerce.
- (a) Use a single chisel per row and apply at the same flow rate per 1000 feet row per chisel as given in table, regardless of row spacing. Gallons per acre will increase as row spacing decreases and vice versa.
- (r) Ala., Ark., Del., Fla., Ga., Ky., La., Md., Miss., N.C., S.C., Tenn., Vo. and the southern third of III. and Mo.
- (s) Do not feed, sell or introduce into com merce hay or hulls taken from heated soil.
- Apply 3 cc under the seed piece.

be used as a feed for dairy animals, ollowing overall treatments.

#### POUR, SPILL, OR STORE NEAR HEAT OR OPEN FLAME . Do not contaminate food and feedstuff • Keep children and pets off treated areas until this material has been washed into soil • Wash thoroughly with soap and water after handling and before eating and smoking.

In case of contact, immediately remove contaminated shoes and clothing and wash skin with soap and water; flush eyes with plenty of water for at least 15 minutes and get medical attention. Do not wear shoes or clothing until ABSOLUTELY free of all chemical odor. If illness results from inhalation, remove to fresh air and call a doctor. If swallowed, call a doctor. Induce vomiting by giving an emetic such as 2 tablespoonfuls of table salt in a glass of warm water.

In case of spills or use in a confined area have available an approved full face mask equipped with a fresh black canister meeting specifications of the U.S. Bureau of Mines for organic vapors, a full face self-contained breathing apparatus, or full face air-supplied respirator.

#### **USE PRECAUTIONS**

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To avoid reinfestation of treated soil, do not use transplants, tools or crop residues that may be contaminated with soil-borne pests.

If foliage of plants is contacted by the fumigant, wash off immediately with water.

Do not use containers, pumps or other transfer or application equipment made of aluminum, magnesium or their alloys, as under certain conditions FUMAZONE 86E may be severely corrosive to such metals.

Store in tightly closed containers in a cool place away from dwellings and out of reach of children. Not for use or storage in or around the home.

This product is toxic to wildlife. Keep out of lakes, streams or ponds. Birds and other wildlife in treated areas may be killed. Do not apply where runoff is likely to occur. Do not apply when weather conditions favor drift from areas treated.

Rinse equipment and containers and dispose of wastes by burying in non-crop lands away from water supplies.

Containers should be disposed by punching holes in them and burying with wastes. Apply this product only as specified on this label.

NOTICE: Seller warrants that the product conforms to its chemical description and is reasonably fit for the purposes stated on the label with used in accordance with directions under normal conditions of use, but neither this warranty nor any other warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE, express or implied, extends to the use of this product contrary to label instructions, or under abnormal conditions, or under conditions not reasonably foreseeable to seller, and buyer assumes the risk of any such use.

Patented U.S. No. 3,049,472. This product licensed for use according to methods of U.S. Patent 2,937,936 and 3,049,472.

## THE DOW CHEMICAL COMPANY AND SUBSIDIARIES

MIDLAND, MICHIGAN 48640, USA ZURICH, SWITZERLAND HONG KONG, BCC CORAL GABLES, FLORIDA 33134, USA SARNIA, ONTARIO, CANADA **\*** Trademark of THE DOW CHEMICAL COMPANY

FUMAZONE 86E is not recommended for use on extremely heavy mineral or muck soils.

H373





#### ACTIVE IN'GREDIENTS: +

1,2-dibromo-3-chloropropune and related

halogenated C3 aliphatics	84.0%
INERT INGREDIENTS	
Contains 12.1 Pounds of Active Ingredients Per Gall	on.

E.P.A. Registration No. 464-322-AB

FUMAZONE 86E nematicide is intended for application to mineral soil to con trol plant parasitic nematodes such as awl, burrowing, citrus, cyst, dagger, lance, lesion or meadow, pin, ring, root-knot, spiral, sting and stubby root, also symphylans, injurious to crops listed in the accompanying "Dosage and Use Recommendations" table FUMAZONE 86E is an emulsifiable formulation suitable for use "as is" or diluted with water. For best results provide continuous, mechani cal agitation of nematicide-water mixtures during both mixing and application. Before Using This Product, Read All Use Precautions and Statements of Hazard Given on Label.

#### GENERAL INFORMATION

Apply FUMAZONE 86E when soil temperature at a depth of not less than 5 inclus is between 40 and 80 F. Soil should be in seedbed conditions with adequate moisture for good seed germination. Work plant remains into the soil and allow time to decompose before treating. Do not treat extremely wet or dry soils by injection type application. Read the entire label before making application.

#### OVERALL (BROADCAST) APPLICATION

Method: Overall applications may be made using any of several procedures, all of which place the fumigant within the soil zone of nematode infestation. Preferably, use chisel equipment, with the chisels spaced 12 inches apart. Plowsole equipment may also be used. With both types of applicator, release the fumigant at a depth of 5 to 8 inches below the normal soil surface. For treatment of shallow rooted crops such as peanuts and vegetable crops listed in the table, the fumigant may be applied as a coarse spray to the soil surface followed by immediate incorporation to a depth of 2 to 4 inches and sealing. Double-discing or equivalent is recommended for soil incorporation. To ensure satisfactory results the spray, soil incorporation, and sealing equipment should be placed in-line so as to make the treatment in one operation. Overall treatment may also be accomplished by irrigation or drench application according to directions provided elsewhere on this label

Soil Sealing: Immediately after application seal the soil by compacting the surface with a roller, cultipacker or similar device or by sprinkling lightly with water After plowsole application disc the land then compact by rolling.

Exposure Period: After overall preplant application, leave soil undisturbed for 7 to 14 days

Aeration and Preparation of Soil Before Planting: After overall preplant ap plication the soil should be aerated by deep cultivation at the end of the exposure period. If heavy rains occur, accompanied by low temperatures during the exposure period, additional aerotion is required. Working the soil several times before planting will aid in aeration which is usually adequate when the fumigant odor is gone. Shallow rooted crops can usually be planted about one week after the end of the exposure period. For deep rooted trees and shrubs, the aeration period after preplant treatments should be 4 to 6 weeks

#### ROW APPLICATION

For Use as Preplant and at Planting Time: Use two or more chisels per row de pending upon the width of the area to be treated. Se chisels 12 inches apart and inject the fumigant 5 to 8 inches below the final soil surface planting level For preplant applications the treated rows may be marked by bedding or listing, and by tractor or press wheels

For Use as Postplant Application; Use two or more chisels per row and in such a manner as to treat both sides of the row, with the chisel injection lines no closer to the plant line than 4 inches

Planting Instructions with Row Application: Direct seeding may be done at the time the nematicide is applied or at any time after a preplant application Keep seed at least 4 inches away from chisel injection furrow to avoid poor stands due to loose soil in the area. This is particularly important with certain small seeded crops, which may suffer stand reduction especially when soil be comes cool or wet following application of the nematicide. When setting trans plants, use following instruction (1) Preplant treatment with 14 day wait, plant anywhere, or (2) Preplant treatment with less than 14 day wait, set plants at least 4 inches from chisel injection furrow, or (3) Planting time treatment, set plants cit least 4 inches from chisel injection furrows

For best control of nematodes, seal all row treated soil immediately after ap plication and after any subsequent disturbing of the soil within 7 days after treatment. This can be done by tractor wheels or by listing or bedding followed by ing rollers, press wheels or light sprinkler irrigation

#### IRRIGATION APPLICATION (Fleed and Basin)

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ingredient in sufficient water to give penetration to the desired depth. 0.561 gallons of FUMAZONE 86E per acre inch of irrigation water will provide 30 ppm by weight of active ingredient. For the irrigation treatment, multiply 0.561 gallons by the number of acre inches of water to be applied by the number of acres to be fumigated. For example, if an irrigation of 5 acre inches of water is planned and 10 acres are to be treated, the following calculation will give the number of gallons of FUMAZONE 86E required:

In this case the dosage is equivalent to 2.805 gallons of FUMAZONE 86E per acre.

Irriaation Application Eavipment: For best results FUMAZONE 86E should be applied by introducing the fumigant into the intake side of a centrifuga pump having a minimum output of not less than 4% of the total gallons of water of the irrigation system. The fumigant should be metered directly into the Lump from its original container through a simple gravity flow applicator. There are several excellent applicators of this type commercially available

Water Requirements to Bring Soil Moisture from the Wilting Point to Field Capacity: It has been determined that this fumigant in irrigation water will penetrate the soil to approximately one half of the depth of the water penetration. Therefore, sufficient water should be applied to bring the field capacity to a depth about twice that desired to be fumigated. On deep sandy soils this will require about 4 to 6 acre inches of water. The following table is offered as a guide o estimate the water requirements to bring soil moisture from the wilting point to ield capacity.

	Acre Inches of Water Required For:		
Type of Soil	Top 6 to 8 inches of soil	Each additional fo of soil depth	
Sand	<sup>1</sup> /2 to 1	1 2 to 1	
Loam	1 to 2	1 to 2	
Clay	2 to 3	2 to 3	

#### APPLICATION SUGGESTIONS:

- which is based on total volume of irrigation water.
- irrigition water
- than once a year.

#### DRENCH APPLICATION (For Professional Use Only)

for overall treatment of established turf (lawns, golf course fairways and greens, and other ornamental and recreational turf grass areas) and around tolerant ornamental plants, thoroughly mix the required amount of FUMAZONE 86E with water and apply the resulting emulsion evenly with a sprinkling can or hose proportioner. Use at least 20 gallons of water for each 100 square feet of area to be treated. After application of fumigant apply enough clear water to wash the foliage and wet the soil to a depth of 8 inches. To improve control aerate and wet the soil thoroughly before application of fumigant. NOTE: Because of possible rapor hazard, make the treatment during cooler hours of the day. If exposure to vapors is likely, wear or have available suitable respiratory protect tion as recommended on this label

#### **APPLICATION WITHIN CONFINED AREAS**

FUMAZONE BOE may be used in confined areas, such as greenhouses, provided the area is well ventilated during and after application. Wear or have available suitable respiratory protection as recommended on this label if there is any like Ithough all muses was be undered

## SPECIMEN LABEL WARNING **KEEP OUT OF REACH OF CHILDREN Read Complete Precautions on Side Panel**

Example: 0.561 x 5 x 10 28.05 gallons

1. Apply the fumigant in all the water used in a given irrigation

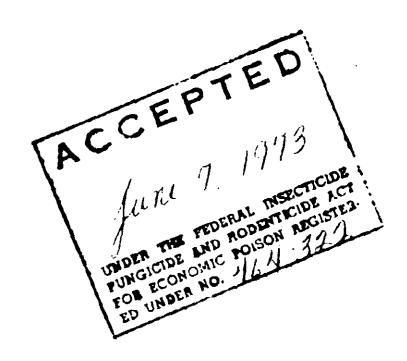
2. Do not use more treated water per acre in one irrigation than will provide the naximum dosage of FUMAŽONE 86E recommended for each crop listed in the accompanying "Dosage and Use Recommendations" table

3. Alway, determine the water delivery rates of the pump and canal or datch before irrigation. This determination is necessary to assure accurate dosage

4. Irrigate with a maximum amount of water in a minimum period of time. Best results are obtained when irrigation time is two hours or less

5. For best results, cover as much of the soil surface as possible with the treated

6. The necessity for treatment of perennial crops is dependent upon reestablish ment of damaging nematode populations. Overall treatment will usually give 2 to 4 years control of nematodes. To avoid the possibility of exceeding the residue tolerances of food crops, do not treat by irrigation more often



#### + Contains 12.1 Pounds of Active Ingredients Per Gallen. E.P.A. Registration No. 464-322-AB

FUMAZONE 86E nematicide is intended for application to mineral soil to control plant parasitic nematodes such as awl, burrowing, citrus, cyst, dagger, lance, lesion or meadow, pin, ring, root-knot, spiral, sting and stubby root, also symphylans, injurious to crops listed in the accompanying "Dosage and Use Recommendations" table FUMAZONE 86E is an emulsifiable formulation suitable for use "as is" or diluted with water. For best results provide continuous, mechanical agitation of nematicide-water mixtures during both mixing and application. Before Using This Product, Read All Use Precautions and Statements of Hazard Given on Label.

#### GENERAL INFORMATION

Apply FUMAZONE 86E when soil temperature at a depth of not less than 5 inches is between 40 and 80 F. Soil should be in seedbed conditions with adequate moisture for good seed germination. Work plant remains into the soil and allow time to decompose before treating. Do not treat extremely wet or dry soils by injection type application. Read the entire label before making application.

#### OVERALL (BROADCAST) APPLICATION

Method: Overall applications may be made using any of several procedures, all of which place the fumigant within the soil zone of nematode infestation. Preferably, use chisel equipment, with the chisels spaced 12 inches apart. Plowsole equipment may also be used. With both types of applicator, release the fumigant at a depth of 5 to 8 inches below the normal soil surface. For treatment of shallow rooted crops such as peanuts and vegetable crops listed in the table, the fumigant may be applied as a coarse spray to the soil surface followed by immediate incorporation to a depth of 2 to 4 inches and sealing. Double-discing or equivalent is recommended for soil incorporation. To ensure satisfactory results the spray, soil-incorporation, and sealing equipment should be placed in-line so as to make the treatment in one operation. Overall treatment may also be accomplished by irrigation or drench application according to directions provided elsewhere on this label

Soil Sealing: Immediately after application seal the soil by compacting the surface with a roller, cultipacker or similar device or by sprinkling lightly with water. After plowsole application disc the land then compact by rolling

**Exposure Period:** After overall preplant applicate in leave soil undisturbed for 7 to 14 days

Aeration and Preparation of Soil Before Planting; After overall preplant application, the soil should be aerated by deep cultivation at the end of the exposure period. If heavy rains occur accompanied by low temperatures during the exposure period, additional deration is required. Working the soil several times before planting will aid in aeration which is usually adequate when the fumigant odor is gone. Shallow rooted crops can usually be planted about one week after the end of the exposure period. For deep rooted trees and shrubs, the actation period after preplant treatments should be 4 to 6 weeks.

#### ROW APPLICATION

For Use as Preplant and at Planting Time: Use two or more chisels per row depending upon the width of the area to be treated. Set chisels 12 inches aport and inject the fumigant 5 to 8 inches below the final soil surface planting level. For preplant applications the treated rows may be marked by bedding or listing, and by tractor or press wheels.

For Use as Postplant Application: Use two or more chisels per row and in such a manner as to treat both sides of the row, with the chisel injection lines no closer to the plant line than 4 inches

Planting Instructions with Row Application: Direct seeding may be done at the time the nematicide is applied or at any time after a preplant application. Keep seed at least 4 inches away from chisel injection furrow to avoid poor stands due to loose soil in the area. This is particularly important with certain small seeded crops, which may suffer stand reduction especially when soil becomes cool or wet following application of the nematicide. When setting transplants, use following instruction (1) Preplant treatment with 14 day wait, plant anywhere, or (2) Preplant treatment with less than 14 day wait, set plants at least 4 inches from chisel injection furrow, or (3) Planting time treatment, set plants at least 4 inches from chisel injection furrows

For best control of nematodes, seal all row treated soil immediately after ap plication and after any subsequent disturbing of the soil within 7 days after treatment. This can be done by tractor wheels or by listing or bedding followed by ring rollers, press wheels or light sprinkler irrigation

#### IRRIGATION APPLICATION (Flood and Basin)

FUMAZONE 86E is recommended for use at the rate of 30 ppm of the active lihood of exposure to vapors.

#### 86-1164 PRINTED IN MARCH, 1973

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REPLACES SPECIMEN LABEL 86-1164 PRINTED IN JANUARY, 1973.

#### **REVISIONS INCLUDE:** (1) PRECAUTIONARY LABELING REVISED. (2) APPLICATION DIRECTIONS THROUGHOUT THE LABEL REVISED. (3) USE PRECAUTIONS REVISED. (4) TENNESSEE ADDED TO LIST OF STATES.

#### NEEP UUI UT REAVII UT VIILUILII **Read Complete Precautions on Side Panel**

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