



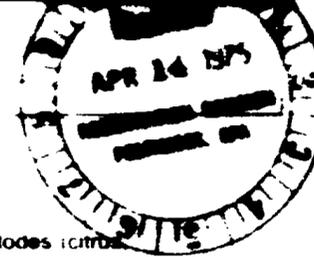
Subsidiary of Allied Equities Corp.

765 Landess Avenue  
P.O. Box 319  
Milpitas, California 95035  
(408) 263-2020

# PRODUCT BULLETIN

NAMCO Methyl Bromide  
NAMCO (Name)  
NAMCO (Name)

EPA Reg. No. 5316-41-AA  
EPA Reg. No. 5316-42-AA  
EPA Reg. No. 5316-43-AA



NAMCO Methyl Bromide (Name) or Pintotome may be used to control nematodes (citrus burrowing and root knot nematode), fungus diseases (*Armillaria mellea* Oak Root Fungus, *Phytophthora* root and crown rot), and other soil-borne organisms and weeds, and to be planted or replanted to deciduous fruits and nuts, citrus, and vineyards. WHERE THE CROPS WILL NOT BE HARVESTED FOR A PERIOD OF AT LEAST 24 MONTHS

### RATES & PRECAUTIONS:

FOR CITRUS, BURROWING AND ROOT KNOT NEMATODE: Apply 1 - 1 1/2 pounds per 100 square feet

PHYTOPHTHORA ROOT ROT: Apply 1 1/2 pounds per 100 square feet and a 4 day exposure using tarping

OAK ROOT FUNGUS (*Armillaria mellea*) To facilitate deep penetration to the fumigant, the subsoil should be as loose as possible. This may be accomplished by allowing weeds to grow without irrigation or by planting a crop of Sudan grass in the spring - and withholding moisture throughout the summer. In the fall the soil should be further prepared as described elsewhere. Rates vary from 1 - 1 1/2 pounds in sandy soils, to 2 pounds per 100 square feet in clay loam soils. Peat and soils high in organic matter should not be fumigated for *Armillaria*. NOTE: Complete eradication of *Armillaria* is difficult and rarely achieved. Retreatment of localized areas should be made as necessary.

Note: Due to the absence of a warning agent - chloropicrin - in NAMCO Methyl Bromide, the treated area is required to be tarped when this material is used in any manner listed below.

### APPLICATION METHODS:

BACK HOEING AND AUGERING: Remove soil to a depth of 5 feet - or as desired, back-fill hole with 2 feet, insert applicator tube or tree site injector, fill hole and release entire dose of fumigant for 100 square feet tree site. After removal of applicator, prevent too rapid escape of fumigant by tamping or compacting soil or tarping.

TREE SITE INJECTOR: Insert the injector as far as possible - at least 18 inches, into the soil. Tamp soil tightly around injector to minimize escape of fumigant from soil. Release entire dosage of fumigant for 100 square feet tree site and move away from the injector until fumigant is completely released. Remove injector and seal hole with soil.

TARPING: Work up soil in an area 10 x 10 feet to a depth of 3 feet. Place one end of the applicator into an evaporating container in the center of the site. Run the other end of the applicator tube beyond the area to be tarped. The tarp should be supported above the soil surface within the site and sealed securely around the edges with soil. Attach the applicator tube to container, release fumigant, remove applicator tube and seal edge. Leave cover in place for 48 hours. For *Phytophthora* the cover should be left in place for 4 days.

TRACTOR DRAWN INJECTION EQUIPMENT: For *Armillaria mellea*, the soil should be ripped as deeply as possible, 30 inches minimum, and further worked to eliminate clods and debris prior to fumigation. Inject the 5 1/2 feet apart. The area should be cultipacked (not permitted in California) or covered with a gas tight tarpaulin immediately after injection. The tarpaulin should be allowed to remain in place for at least 7 days. Strip fumigation is permissible.

STRIP FUMIGATION: To aid in the establishment of grape vineyards in land with high weed populations and nematodes, apply the fumigant at the rate of 300 to 400 pounds per acre calculated on the basis of actual area treated centering on the future stake line. Inject the fumigant using tractor drawn equipment 6 to 12 inches deep and cover immediately with a gas tight tarpaulin. Note: This method is most effective when the soil is moist and worked to "seed bed" condition prior to treatment

REFER TO THE PRODUCT LABEL FOR ADDITIONAL DIRECTIONS AND PRECAUTIONS  
OBSERVE THESE CAREFULLY

NAMCO®. trademark of NAMCO CHEMICALS.

ACCEPTED  
5/27/75  
5/28/75  
(5/31/75)  
UNDER THE FEDERAL INSECTICIDE ACT  
EPA REG. NO. 5316-41-AA  
EPA REG. NO. 5316-42-AA  
EPA REG. NO. 5316-43-AA

Apply only as specified on this label.

Treated land may be planted to

Strawberries and tomatoes.

Ornamentals, floral crops and turf;

Fruit trees, vegetables, and field crops which will transplanted—and grown to maturity—in untreated soil.

### TREATMENT PREREQUISITES

**SOIL PREPARATION:** To facilitate fumigant penetration, plant refuse should be worked into the soil and time allowed to decompose before treating. Soil must be in good workable seed bed condition, warm, preferably 50° to 80° F. at a depth of 5 inches. Do not treat if the soil temperature is below 45° F. at the 5 inch level.

**IRRIGATION REQUIREMENT:** Land to be fumigated should be well irrigated 5 to 10 days prior to fumigation, and worked to seed bed condition just prior to treatment, to insure uniform moisture from surface to depth which control is desired.

### APPLICATION AND DOSAGE

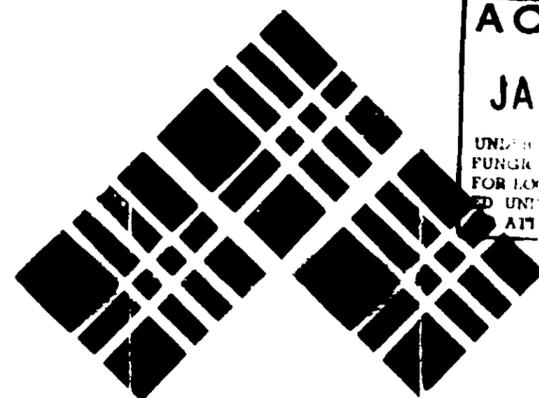
**APPLICATION:** Apply PINTOFUME by means of chisels spaced no more than 12 inches apart and at a depth of 4 to 6 inches below the soil surface. Seal the fumigant into the soil at the time of application with an automatic tarp layer using .001 gauge polyethylene film. If an automatic tarp layer is not available, roll or cultipack immediately behind chisels and then cover with a gas tight tarpaulin within 30 minutes. Remove the tarpaulin after 48 hours. Allow the soil to aerate 10 to 14 days before planting. NOTE: To avoid possible illegal residue allow an aeration period of at least two weeks when transplants of strawberries and tomatoes for crop production are set in fumigated fields. Do not plant if any PINTOFUME is indicated in the soil by odor or eye irritation close examination.

Cylinders containing PINTOFUME are not pressurized and require pressurization with dry nitrogen during application.

**DOSAGE:** Use 200-600 pounds PINTOFUME per acre depending on soil conditions, weather, and the pest involved. Dosages in the higher ranges should be used in areas with severe disease and nematode infestations, when soil temperatures are low, and in heavy soils.

Planting Area:	Pounds of Fumigant
	<b>Per Acre</b>
Seed or transplant beds and nurseries:	} 200 - 600
Ornamentals in general	
Forest, shade and fruit trees Strawberries, and vegetables	
Field plants of agricultural crops:	} 240
Tomatoes and strawberries	
Permanent and field plantings:	} 200 - 600
Ornamentals in general and turf	

To avoid reinfestation of treated soil, do not use transplants, tools, or crop remains that could carry soil-borne plant parasitic pests from infested land. Clean applicator carefully before and after use. Be especially careful when applying this fumigant near dwellings or in areas where prized plants are growing. Avoid application in such areas, especially when there is little or no air movement.



ACCEPTED  
JAN 10 1974  
UNDER THE  
FUNGICIDE ACT  
FOR LABELING  
AND UNIFORM  
ATTACHMENT

550-123

# NAMCO®

# Pintofume

A PREPLANT SOIL FUMIGANT

For Control of Diseases, Nematodes, Soil Borne Insects  
and Some Weeds and Weed Seeds

ACTIVE INGREDIENTS ..... 100%  
 Methyl Bromide ..... 98%  
 Chloropicrin ..... 2%  
 Weight per gallon ..... 14.3 lb.

This product applied as a preplant soil treatment will aid in the control of the following soil-borne pests: wireworms, nematodes (meadow or lesion, root-knot, citrus, sting, stubby-root, dagger, cyst formers); soil diseases (Verticillium and Fusarium wilts, damping off); some broadleaf and grassy weeds and their seeds.

EPA Reg. No. 5316-31-AA

DANGER POISON

Keep Out of Reach of Children  
See all directions on label.

CONTENTS POUNDS NET

MANUFACTURED BY

## NAMCO CHEMICALS

(A Subsidiary of Allied Equities Corp.)

765 Landess Avenue, Milpitas, California

Fresno

Monrovia (L. A. Area)

**CAUTION: NOTE CAREFULLY:** Fumigation may temporarily raise the level of ammonia nitrogen and soluble salts in the soil. This is most likely to occur when heavy rates of fertilizer and fumigant are applied to soils that are either cold, wet, acid, or high in organic matter. To avoid injury to plant roots, fertilize as indicated by soil tests made after fumigation. To avoid ammonia injury or nitrate starvation, or both, to crops, avoid 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. Liming highly acid soils before fumigation stimulates nitrification and reduces the possibility of ammonia toxicity.

### USE PRECAUTIONS

Undesirable concentrations of chloropicrin following soil fumigation with PINTOFUME may drift to nearby areas. If this occurs immediately cover treated area with a plastic tarpaulin. The tarpaulins should remain in place overnight and be removed during the daytime. If the escaping vapors reach an undesirable concentration, as indicated by eye irritation, the treated areas should be recovered. Since air movement assists the dilution of the escaping fumes it is most likely that undesirable concentrations will build up during evening or nights when the air is static. Application of PINTOFUME should not be made when there is little or no air movement or when there is an inversion.

DANGER POISON

Highly Volatile • Vapor Extremely Hazardous  
 Liquid Very Injurious To the Skin and Eyes  
 Penetrates Many Types of Protective Clothing  
 Do Not Breathe Vapor • Use Only as Directed  
 Do Not Get in Eyes, on Skin, or on Clothing or Shoes  
 Store in Cool Place  
 Poisonous Liquid—Skin Contact May Cause Burns

### SEND FOR A DOCTOR IMMEDIATELY IN CASE OF POISONING

**FIRST AID:** If inhaled. Get victim into fresh air. Have him lie down and keep warm and quiet. Give artificial respiration if breathing has stopped. Call a physician immediately.

If liquid gets into the eyes, wash immediately with plenty of water for at least 15 minutes and obtain medical attention promptly. If liquid gets on skin, wash the contaminated area promptly with soap and plenty of water. If liquid gets onto clothing or shoes, remove at once and do not re-use until completely free of the fumigant. Wear goggles and protective clothing of polyethylene when handling. Do not wear rubber clothing. Wear a full-face gas mask with black canister suitable for organic vapors, as specified by U. S. Bureau of Mines.

Not for use or storage in or around the home. Do not store near feed or food products.

This product is toxic to fish and wildlife. Keep out of lakes, streams or ponds. Do not contaminate water by cleaning of equipment or disposal of wastes.

### NOTICE

Return empty container to manufacturer. Be sure to replace caps and plugs before shipment.

NOTICE: Seller warrants that this product conforms to its chemical description and is reasonably fit for the purpose stated on the label when 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 reasonable to Seller, and Buyer assumes the risk of any such use.

NAMCO® trademark of NAMCO CHEMICALS

Apply only as specified on this label.

Treated land may be planted to:

- Strawberries and tomatoes;
- Ornamentals, floral crops and turf;
- Fruit trees, vegetables, and field crops which will be transplanted—and grown to maturity—in untreated soil.

**TREATMENT PREREQUISITES**

**SOIL PREPARATION:** To facilitate fumigant penetration, plant refuse should be worked into the soil and time allowed to decompose before treating. Soil must be in good workable seed bed condition, warm, preferably 50° to 80° F. at a depth of 5 inches. Do not treat if the soil temperature is below 45° F. at the 5 inch level.

**IRRIGATION REQUIREMENT:** Land to be fumigated should be well irrigated 5 to 10 days prior to fumigation, and worked to seed bed condition just prior to treatment, to insure uniform moisture from surface to depth which control is desired.

**APPLICATION AND DOSAGE**

**APPLICATION:** Apply TRIFUME 2 : 2 by means of chisels spaced no more than 12 inches apart and at a depth of 4 to 6 inches below the soil surface. Seal the fumigant into the soil at the time of application with an automatic tarp layer using .001 gauge polyethylene film. If an automatic tarp layer is not available, roll or cultipack immediately behind chisels and then cover with a gas tight tarpaulin within 30 minutes. Remove the tarpaulin after 48 hours. Allow the soil to aerate 10 to 14 days before planting. NOTE: To avoid possible illegal residue allow an aeration period of at least two weeks when transplants of strawberries and tomatoes for crop production are set in fumigated fields. Do not plant if any TRIFUME 2 : 2 is indicated in the soil by odor or eye irritation.

Cylinders containing TRIFUME 2 : 2 are not pressurized and require pressurization with dry nitrogen during application.

**DOSAGE:** Use 400-450 pounds TRIFUME 2 : 2 per acre depending on soil conditions, weather, and the pest involved. Dosages in the higher ranges should be used in areas with severe disease and nematode infestations, when soil temperatures are low, and in heavy soils.

Planting Area:	Pounds of Fumigant Per Acre
Seed or transplant beds and nurseries: Ornamentals in general Forest, shade and fruit trees Strawberries, and vegetables	400 - 450
Field plants of agricultural crops: Tomatoes and strawberries	
Permanent and field plantings: Ornamentals in general and turf	

To avoid reinfestation of treated soil, do not use transplants, tools, or crop remains that could carry soil-borne plant parasitic pests from infested land. Clean applicator carefully before and after use. Be especially careful when applying this fumigant near dwellings or in areas where prized plants are growing. Avoid application in such areas, especially when there is little or no air movement.



# Trifume<sup>®</sup> 2+2

A PREPLANT SOIL FUMIGANT

For Control of Diseases, Nematodes, Soil Borne Insects and Some Weeds and Weed Seeds

ACTIVE INGREDIENTS

Methyl Bromide	50%
Chloropicrin	50%
Weight per gallon	14.3 lb.

This product applied as a preplant soil treatment will aid in the control of the following soil-borne pests: wireworms, nematodes (meadow or lesion, root-knot, citrus, sting, stubby-root, dagger, cyst formers); soil diseases (Verticillium and Fusarium wilts, damping off); some broadleaf and grassy weeds and their seeds.

EPA Reg. No. 5316-39-AA

**DANGER:** Keep Out of Reach of Children

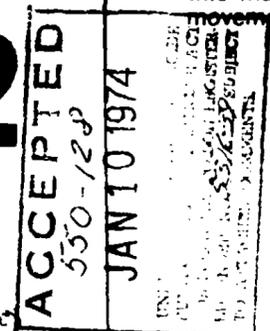
**DANGER POISON**

CONTENTS      POUNDS NET

MANUFACTURED BY  
**NAMCO CHEMICALS**

(A Subsidiary of Allied Equities Corp.)

765 Landess Avenue, Milpitas, California  
Fresno      Mcnrovia (L. A. Area)



**CAUTION: NOTE CAREFULLY:** Fumigation may temporarily raise the level of ammonia nitrogen and soluble salts in the soil. This is most likely to occur when heavy rates of fertilizer and fumigant are applied to soils that are either cold, wet, acid, or high in organic matter. To avoid injury to plant roots, fertilize as indicated by soil tests made after fumigation. To avoid ammonia injury or nitrate starvation, or both, to crops, avoid 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. Liming highly acid soils before fumigation stimulates nitrification and reduces the possibility of ammonia toxicity.

**USE PRECAUTIONS**

Undesirable concentrations of chloropicrin following soil fumigation with this material may drift to nearby areas. If this occurs immediately cover treated area with a plastic tarpaulin. The tarpaulins should remain in place overnight and be removed during the daytime. If the escaping vapors reach an undesirable concentration, as indicated by eye irritation, the treated areas should be recovered. Since air movement assists the dilution of the escaping fumes it is most likely that undesirable concentrations will build up during evening or nights when the air is static. Application of this material should not be made when there is little or no air movement or when there is an inversion.

**DANGER POISON**

- Highly Volatile • Vapor Extremely Hazardous
- Liquid Very Injurious To the Skin and Eyes
- Penetrates Many Types of Protective Clothing
- Do Not Breathe Vapor • Use Only as Directed
- Do Not Get in Eyes, on Skin, or on Clothing or Shoes
- Store in Cool Place
- Poisonous Liquid—Skin Contact May Cause Burns

**SEND FOR A DOCTOR IMMEDIATELY IN CASE OF POISONING**

**FIRST AID:** If inhaled. Get victim into fresh air. Have him lie down and keep warm and quiet. Give artificial respiration if breathing has stopped. Call a physician immediately.

If liquid gets into the eyes, wash immediately with plenty of water for at least 15 minutes and obtain medical attention promptly. If liquid gets on skin, wash the contaminated area promptly with soap and plenty of water. If liquid gets onto clothing or shoes, remove at once and do not re-use until completely free of the fumigant. Wear goggles and protective clothing of polyethylene when handling. Do not wear rubber clothing. Wear a full-face gas mask with black canister suitable for organic vapors, as specified by U. S. Bureau of Mines.

**Not for use or storage in or around the home. Do not store near feed or food products.**

**This product is toxic to fish and wildlife. Keep out of lakes, streams or ponds. Do not contaminate water by cleaning of equipment or disposal of wastes.**

**NOTICE**

Return empty container to manufacturer. Be sure to replace caps and plugs before shipment.

NOTICE: Seller warrants that this product conforms to its chemical description and is reasonably fit for the purpose stated on the label when 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 reasonable to Seller, and Buyer assumes the risk of any such use.

Apply only as specified on this label.

Treated land may be planted to:

- Strawberries and tomatoes;
- Ornamentals, floral crops and turf;
- Fruit trees, vegetables, and field crops which will be transplanted—and grown to maturity—in untreated soil.

#### TREATMENT PREREQUISITES

**SOIL PREPARATION:** To facilitate fumigant penetration, plant refuse should be worked into the soil and time allowed to decompose before treating. Soil must be in good workable seed bed condition, warm, preferably 50° to 80° F. at a depth of 5 inches. Do not treat if the soil temperature is below 45° F. at the 5 inch level.

**IRRIGATION REQUIREMENT:** Land to be fumigated should be well irrigated 5 to 10 days prior to fumigation, and worked to seed bed condition just prior to treatment, to insure uniform moisture from surface to depth which control is desired.

#### APPLICATION AND DOSAGE

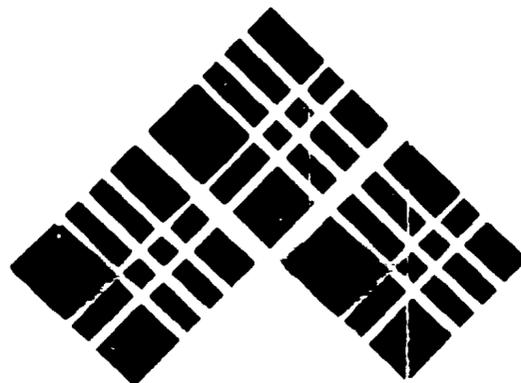
**APPLICATION:** Apply PATHOFUME 57/43 by means of chisels spaced no more than 12 inches apart and at a depth of 4 to 6 inches below the soil surface. Seal the fumigant into the soil at the time of application with an automatic tarp layer using .001 gauge polyethylene film. If an automatic tarp layer is not available, roll or cultipack immediately behind chisels and then cover with a gas tight tarpaulin within 30 minutes. Remove the tarpaulin after 48 hours. Allow the soil to aerate 10 to 14 days before planting. NOTE: To avoid possible illegal residue allow an aeration period of at least two weeks when transplants of strawberries and tomatoes for crop production are set in fumigated fields. Do not plant if any PATHOFUME 57/43 is indicated in the soil by odor or eye irritation.

Cylinders containing PATHOFUME 57/43 are not pressurized and require pressurization with dry nitrogen during application.

**DOSAGE:** Use 300-400 pounds PATHOFUME 57/43 per acre depending on soil conditions, weather, and the pest involved. Dosages in the higher ranges should be used in areas with severe disease and nematode infestations, when soil temperatures are low, and in heavy soils.

Planting Area:	Pounds of Fumigant Per Acre
Seed or transplant beds and nurseries: Ornamentals in general Forest, shade and fruit trees Strawberries, and vegetables	300 - 400
Field plants of agricultural crops: Tomatoes and strawberries	
Permanent and field plantings: Ornamentals in general and turf	

To avoid reinfestation of treated soil, do not use transplants, tools, or crop remains that could carry soil-borne plant parasitic pests from infested land. Clean applicator carefully before and after use. Be especially careful when applying this fumigant near dwellings or in areas where prized plants are growing. Avoid application in such areas, especially when there is little or no air movement.



# NAMCO®

## PATHOFUME® 57/43

### A PREPLANT SOIL FUMIGANT

For Control of Diseases, Nematodes, Soil Borne Insects  
and Some Weeds and Weed Seeds

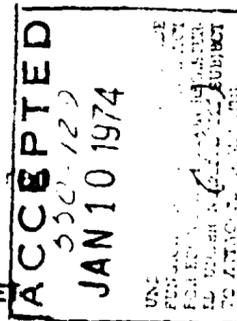
ACTIVE INGREDIENTS .....	100%
Methyl Bromide .....	57%
Chloropicrin .....	43%
Weight per gallon .....	14.3 lb.

This product applied as a preplant soil treatment will aid in the control of the following soil-borne pests: wireworms, nematodes (meadow or lesion, root-knot, citrus, sting, stubby-root, dagger, cyst formers); soil diseases (Verticillium and Fusarium wilts, damping off); some broadleaf and grassy weeds and their seeds.

EPA Reg. No. 5316-40-AA

CONTENTS

POUNDS NET



MANUFACTURED BY

### NAMCO CHEMICALS

(A Subsidiary of Allied Equities Corp.)

765 Landess Avenue, Milpitas, California

Fresno

Monrovia (L. A. Area)

**CAUTION: NOTE CAREFULLY:** Fumigation may temporarily raise the level of ammonia nitrogen and soluble salts in the soil. This is most likely to occur when heavy rates of fertilizer and fumigant are applied to soils that are either cold, wet, acid, or high in organic matter. To avoid injury to plant roots, fertilize as indicated by soil tests made after fumigation. To avoid ammonia injury or nitrate starvation, or both, to crops, avoid 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. Liming highly acid soils before fumigation stimulates nitrification and reduces the possibility of ammonia toxicity.

#### USE PRECAUTIONS

Undesirable concentrations of chloropicrin following soil fumigation with this material may drift to nearby areas. If this occurs immediately cover treated area with a plastic tarpaulin. The tarpaulins should remain in place overnight and be removed during the daytime. If the escaping vapors reach an undesirable concentration, as indicated by eye irritation, the treated areas should be recovered. Since air movement assists the dilution of the escaping fumes it is most likely that undesirable concentrations will build up during evening or nights when the air is static. Application of this material should not be made when there is little or no air movement or when there is an inversion.

DANGER POISON

- Highly Volatile • Vapor Extremely Hazardous
- Liquid Very Injurious To the Skin and Eyes
- Penetrates Many Types of Protective Clothing
- Do Not Breathe Vapor • Use Only as Directed
- Do Not Get in Eyes, on Skin, or on Clothing or Shoes
- Store in Cool Place
- Poisonous Liquid—Skin Contact May Cause Burns

#### SEND FOR A DOCTOR IMMEDIATELY IN CASE OF POISONING

**FIRST AID:** If inhaled. Get victim into fresh air. Have him lie down and keep warm and quiet. Give artificial respiration if breathing has stopped. Call a physician immediately.

If liquid gets into the eyes, wash immediately with plenty of water for at least 15 minutes and obtain medical attention promptly. If liquid gets on skin, wash the contaminated area promptly with soap and plenty of water. If liquid gets onto clothing or shoes, remove at once and do not re-use until completely free of the fumigant. Wear goggles and protective clothing of polyethylene when handling. Do not wear rubber clothing. Wear a full-face gas mask with black canister suitable for organic vapors, as specified by U. S. Bureau of Mines.

Not for use or storage in or around the home. Do not store near feed or food products.

This product is toxic to fish and wildlife. Keep out of lakes, streams or ponds. Do not contaminate water by cleaning of equipment or disposal of wastes.

#### NOTICE

Return empty container to manufacturer. Be sure to replace caps and plugs before shipment.

NOTICE: Seller warrants that this product conforms to its chemical description and is reasonably fit for the purpose stated on the label when 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 reasonable to Seller, and Buyer assumes the risk of any such use.

NAMCO® and PATHOFUME® trademarks of NAMCO CHEMICALS