



# DE-FEND-TOX

**ACTIVE INGREDIENTS:**

Toxaphene 47.7%  
Dimethoate 8.0%  
Xylene 23.5%

**INERT INGREDIENTS:**

Total 100.0%

Technical Chlorinated camphene (67-69% chlorine)  
O,O-Dimethyl S-(1-methylcarbamoyl(1-methyl) phosphorodithioate

## WARNING Keep Out of Reach of Children

SEE OTHER PRECAUTIONS ON THE SIDE PANEL.

May be fatal if swallowed! Do not breathe spray mist. Do not get in eyes, on skin, or on clothing. Wash thoroughly after using.

EPA Reg. No. 145-1131

CG 5.75

EPA Est. No. 145-CA-1



THOMPSON HAYWARD  
CHEMICAL COMPANY

PO BOX 7181 KANSAS CITY, MISSOURI 64113

**BY AIR:** Use 5-10 gal. of water per acre.

**BY GROUND:** Use 20-50 gal. of water per acre.

**DIRECTIONS FOR USE:**

**BEANS** (green, lima, dry): For control of Aphids, Armyworms, Cutworms, Leafhoppers, Leafminers, Lygus bugs and Mites use 5 pints per acre. Do not apply after pods begin to form. Do not feed treated vines to dairy animals or animals being finished for slaughter.

**COTTON:** For control of Aphids, Leafhoppers, Lygus bugs, Mites, and Thrips use 5 pints per acre. Do not apply within 14 days of harvest. Do not feed treated forage or graze livestock on treated fields. Do not repeat application within 14 days.

**SEED ALFALFA:** For control of Aphids, Grasshoppers, Leafhoppers and Lygus bugs use 5 pints per acre. Do not apply during bloom period. Do not apply more than once per season. Do not apply within 28 days of harvest. Do not feed treated forage to dairy animals or animals being finished for slaughter.

**CITRUS** (Arizona and California only): For control of Aphids, Thrips, Mites (except rust mite) — use 2½ pints per 100 gallons of water. Scales (except black or snow), White Flies — use 1 quart per 100 gallons of water. Grasshoppers — use 3 quarts per acre. May be used on bearing Lemons and Oranges; non-bearing only on other citrus crops. Do not apply within 30 days of harvest. Do not feed treated forage to dairy animals or animals being finished for slaughter.

**PEPPERS:** For control of Aphids, Beetles, Hornworms — use 3 pints per acre. Colorado Potato Beetles, Blister Beetle, Colorado Potato Worms — use 2 quarts per acre at time of harvest.

**TOMATOES:** For control of Aphids, Cabbage Loopers, Colorado Potato Beetles, Grasshoppers, Leafminers, Russet Mite, Thrips, Tomato Pinworms — use 5 pints per acre. Do not apply within 14 days of harvest.

**DO NOT USE, POISONOUS TO HUMANS, HEAT OR OXIDATION.**

**OUTDOOR ORNAMENTAL PLANTS:** Generally effective in controlling aphid, beetle, boxelder bug, frog hopper, scale, leafhoppers, and mites. For the control of specific pests consult your state experiment station or extension service.

Do not use on ornamental plants or any ornamental stock plants grown in material, such as cuttings, layers, grafting or budding. Do not use on cut plants. Do not use on plants growing in soil. Make adequate sprays when pest first observed. Do not over-dose. The uses listed below are foliar.

Control of Aphids, Leafminers, Maggots, Flea Beetles — use 3 1/3 pints per acre. For Armyworms, Colorado Potato Beetle, Cutworms, Fruitworms, use 2 quarts per acre. Do not apply within 5 days of harvest.

Control of Aphids, Armyworms, Blister Beetles, Colorado Potato Beetle, Cutworms, Flea Beetles, Leafminers, Leafhoppers, Pinworms, Thrips, Tomato Fruitworms, Tomato Hornworms — use 2 quarts per acre. Do not apply within 7 days of harvest.

**DO NOT USE, POUR, SPILL OR STORE NEAR HEAT OR OPEN FLAME.**

**ORNAMENTAL PLANTS:** DE-FEND TOX is generally effective against aphids, thrips, bagworm, blister beetle, frog hopper, snout beetle, leaf miners, and mites. For proper timing of treatments on ornamental plants consult your local extension agent or state agricultural extension office.

Do not use on ornamental plants not listed. Do not use on stock plants grown as a source of propagation by cuttings, layers, root stocks or scions for propagation. Do not use in spray mixtures containing oil on plants growing in greenhouses. Do not spray when pests appear or when damage is done. Do not over-dose or overspray. The following are foliar sprays:

**USE PRECAUTIONS**

Do not feed treated forage to dairy animals or animals being finished for slaughter.

Do not contaminate feed or foodstuffs. Not for use or storage in or around the house.

This product is highly toxic to bees exposed to direct treatment or residues on crops. Protective information may be obtained from your Cooperative Agricultural Extension Service. Do not reuse empty drum. Return to drum reconditioner or destroy by perforating or crushing and burying in a safe place away from water supplies.

This product is toxic to fish, shrimp, crab, birds and other wildlife. Birds feeding on treated areas may be killed. Keep out of lakes, streams, ponds, tidal marshes and estuaries. Do not apply where runoff is likely to occur. Do not apply when weather conditions favor drift from areas treated. Do not contaminate water by cleaning of equipment or disposal of wastes. Apply this product only as specified on this label.

**NOTICE**

*Seller makes no warranty, expressed or implied, concerning the use of this product other than indicated on the label. Buyer assumes all risk of use and/or handling of this material when such use and/or handling is contrary to label instructions.*

ORNAMENTAL PLANTS ONLY	PESTS CONTROLLED	PINTS PER 100 GAL. WATER	TABLETS-BOSS PER 7 GAL. WATER
AZALEAS	Lace Bugs Leafminers Mites Tom Scale White Flies	5	5
BIRCH	Aphids For leafminers, apply when leaves are expanded (about mid-May) and repeat in early July.	2 1/2	2 1/2
BREWERS	Leafminers Mealy Bug Mites	5	5
CAMELLIAS	Aphids Camellia Scale Mites Tom Scale	5	5
CARNATIONS	Aphids Mites Lace Bugs Leafminers	5	5
EUONYMUS	Aphids Scale	10	0
GLABELLAS	Aphids Thrips	5	5
HYDRANGEA	Mites Scale	5	5
JASMINE	Aphids Bagworms Mites	10	10
LYNCH	Aphids Bagworms European Pine Shoot Moth Nymphs of Pine Tip Moth Zimmerman Pine Moth	5	10
7565	Aphids Leafhoppers Mites Thrips	5	5

**ACCEPTED**  
**JUL 3 1945**  
 Under the Federal Insecticide, Fungicide, and Plant Disease Act as amended, this pesticide is registered under...

48-1131



# DE-FEND-TOX

**ACTIVE INGREDIENTS:**

Toxaphene*	.....	47.7%
Dimethoate**	.....	8.0%
Xylene	.....	23.5%

**INERT INGREDIENTS:**

.....	.....	20.8%
	Total	100.0%

\* Technical Chlorinated camphene (67-69% chlorine)  
 \*\*O,O-Dimethyl S-[(methylcarbamoyl)methyl] phosphorodithioate

## **WARNING Keep Out of Reach of Children**

SEE OTHER PRECAUTIONS ON THE SIDE PANEL.

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EPA Reg. No. 148-1131

CG-5-75

EPA Est. No. 148-CA-1



THOMPSON HAYWARD  
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**PEPPERS:** For control of Aphids, Leafminers, Maggots, Flea Beetles, Hornworms — use 3 1/3 pints per acre. For Armyworms, Blister Beetle, Colorado Potato Beetle, Cutworms, Fruitworms — use 2 quarts per acre. Do not apply within 5 days of harvest.

**TOMATOES:** For control of Aphids, Armyworms, Blister Beetles, Cabbage Loopers, Colorado Potato Beetle, Cutworms, Flea Beetles, Grasshoppers, Leafminers, Leafhoppers, Pinworms, Russet Mite, Thrips, Tomato Fruitworms, Tomato Hornworms use 5 pints per acre. Do not apply within 7 days of harvest.

**DO NOT USE, POUR, SPILL OR STORE NEAR  
HEAT OR OPEN FLAME.**

**OUTDOOR ORNAMENTAL PLANTS:** DE-FEND TOX is generally effective in controlling aphids, thrips, bagworm, blister beetle, boxelder bug, frog hopper, snout beetle, leaf miners, scales, leafhoppers, and mites. For proper timing of treatments for the control of specific pests on ornamental plants consult your state experiment station or state agricultural extension service.

Do not use on ornamental plants not listed. Do not use on any ornamental stock plants grown as a source of propagation material, such as cuttings, layers, root stocks or scions for grafting or budding. Do not use in spray mixtures containing oil. Do not use on plants growing in greenhouses. Make adequate sprays when pests appear or when damage is first observed. Do not overdose or overspray. The uses listed below are foliar sprays.

**USE PRECAUTIONS**

Do not feed treated forage to dairy animals or animals being finished for slaughter.

Do not contaminate feed or foodstuffs. Not for use or storage in or around the house.

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ORNAMENTAL  
PLANTS  
OUTDOOR  
PLANTS ONLY

AZALEAS

BIRCH

BOXWOOD

CAMELLIAS

CARNATION

EUONYMUS

GLADIOLAS

HEMLOCK

JUNIPER

PINE

ROSES

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ORNAMENTAL PLANTS OUTDOOR PLANTS ONLY	PESTS CONTROLLED	PINTS PER 100 GAL. WATER	TABLESPOONS PER 3 GAL. WATER
AZALEAS	Lace Bugs Leafminers Mites Tea Scale White Flies	5	5
BIRCH	Aphids For leafminers, apply when leaves are expanded (about mid-May) and repeat in early July.	2½	2½
BOXWOOD	Leafminers Mealy Bugs Mites For leafminers, apply in spring when leaf flies first appear or in early summer for control of larvae in the infested leaves.	5	5
CAMELLIAS	Aphids Camellia Scale Mites Tea Scale	5	5
CARNATIONS	Aphids Mites Lace Bugs Leafminers Apply when pests appear or when damage is first observed.	5	5
EUONYMUS	Aphids Scale	10	10
GLADIOLAS	Aphids Thrips	5	5
HEMLOCK	Mites Scale	5	5
JUNIPER	Aphids Bagworms Midges Mites	10	10
PINE	Aphids Bagworms European Pine Shoot Moth Nantucket Pine Tip Moth Zimmerman Pine Moth	10	10
ROSES	Aphids Leafhoppers Mites Thrips	5	5

