

ACCEPTED

MAR 25 1981

Under the Federal Insecticide,
Fungicide, and Rodenticide Act,
as amended, for the pesticide
Registration Number
EPA Reg. No. 1109-34

FLOWABLE TRI-BASIC COPPER

ACTIVE INGREDIENT
Basic copper sulfate 54.0%

INERT INGREDIENTS 46.0%
(Copper as metallic 29.2%)

This product contains 8 lbs. of Tri-Basic copper sulfate per gallon.

**KEEP OUT OF REACH OF CHILDREN.
HARMFUL IF SWALLOWED.**

WARNING

STATEMENT OF PRACTICAL TREATMENT

If swallowed: Drink 1 or 2 glasses of water or milk and induce vomiting by touching back of throat with finger or blunt object. Do not induce vomiting or give anything by mouth to an unconscious person. Get medical attention.

If in eyes: Flush eyes with water for at least 15 minutes, holding eyelids apart. Seek medical attention immediately.

See left side panel for additional precautionary statements.

Mfg. by: Cities Service Company
Copperhill Operations
Copperhill, Tennessee

EPA Reg. No. 1109-34
Form No. 9-34A

EPA Est. No.

Net Contents _____ Gallons

**PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS
KEEP OUT OF REACH OF CHILDREN**

WARNING

HARMFUL IF SWALLOWED.

Causes eye irritation. Do not get in eyes. Wear goggles or face shield while handling.

ENVIRONMENTAL HAZARDS

This product is toxic to fish. Keep out of lakes, streams, or ponds. Do not apply when weather conditions favor drift from area treated. Do not contaminate water, food, or feed by storage, cleaning of equipment, or disposal of wastes.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

STORAGE AND DISPOSAL

STORAGE: Do not allow this product to freeze. Store at temperatures above 40° F.

DISPOSAL: Pesticide, spray mixture, or rinsate that cannot be used should be disposed of in a landfill approved for pesticides, or buried in a safe place away from water supplies.

CONTAINER DISPOSAL: For all metal or plastic containers, triple rinse (or equivalent) and dispose of in an approved landfill or bury in a safe place. For all fibre drums, open burning and dumping is prohibited. Consult Federal, State, or local disposal authorities for approved procedures.

MIXING RECOMMENDATIONS

Fill spray tank approximately 1/2 full of amount of Flowable Tri-Basic Copper tank to about 1/4 full and add the spreader-sticker. Finish filling the spray tank when spraying is complete. Never allow a

FRUIT

Almonds: Brown rot and Shot hole — per 100 gallons water with 1 gallon sticker for control of Brown rot and Shot hole stage. Do not spray after trees are in full leaf. Brown rot apply December 15 to January 15. Shot hole apply 1 to 2 gallons per acre. Note: Use 1 1/2 gallons per acre for popcorn stage. With aerial spray during Brown rot, apply 2 to 2 1/2 gallons per acre spreader-sticker.

Apricots: Brown rot and Shot hole — per 100 gallons water combined with 1 gallon sticker for control of Shot hole disease apply November 15 to December 15. Brown rot should be applied throughout the season when trees are in leaf. Concentrate 1 1/2 gallons sticker per acre and apply to swelling buds and reduce to 1 1/4 gallons per acre for control of Shot hole. Apply the maximum rate shown above in November and December, but after

Avocados — Anthracnose, Scab, Black spot — per 100 gallons water combined with 1 gallon sticker. Begin treatment when blossoms are open. Repeat when blossoms are past. Last spray 140 days after bloom. Add B-1956, or similar types at their maximum control effectiveness.

Berries (Blackberries, Boysenberries, Raspberries, Rubus) — Use 1 quart per 100 gallons water. Repeat when flower buds show white. **Cane spot and Yellow rust** — In spray tank apply when leaf buds begin to open. Apply a post-harvest spray after pruning. Use 100 gallons water combined with 1

FLOWABLE TRIS-BASIC COPPER

..... 54.0%
..... 48.0%
(as metallic 29.2%)
.....
.....
..... of Tri-Basic copper sulfate per gallon.

MIXING DIRECTIONS AND RECOMMENDATIONS FOR USE

Fill spray tank approximately $\frac{1}{2}$ full of water and with agitator running, add the required amount of Flowable Tri-Basic Copper. If a spreader-sticker is recommended, fill spray tank to about $\frac{3}{4}$ full and add the amount recommended by the manufacturer of the spreader-sticker. Finish filling the spray tank with water and keep agitator running until spraying is complete. Never allow a pesticide to remain in the spray tank overnight.

FRUITS AND NUTS

Almonds: Brown rot and Shot hole — Conventional dilute spray — Use 2 to 2½ quarts in 100 gallons water with 1 gallon sticker and apply 350 to 400 gallons per acre. Bud sprays for control of Brown rot and Shot hole should be applied at pink bud through popcorn stage. Do not spray after trees are in leaf. As a dormant spray for control of Shot hole and Brown rot apply December 15 to January 15. Concentrate sprayers — Use 1¼ to 1½ gallons combined with 1 to 2 gallons sticker and apply as above in 25 to 50 gallons water per acre. Note: Use 1½ gallons per acre through swelling buds and 1¼ gallons per acre in popcorn stage. With aerial spray during the dormant season for control of Shot hole and Brown rot, apply 2 to 2½ gallons per acre in 20 gallons of water combined with a spreader-sticker.

Apricots: Brown rot and Shot hole — Conventional dilute spray — Use 2 to 2½ quarts per 100 gallons water combined with $\frac{1}{2}$ to 1½ gallons sticker. As a dormant spray for control of Shot hole disease apply November 15 to January 15. Bud sprays for control of Brown rot should be applied through swelling buds and popcorn stage. Do not spray when trees are in leaf. Concentrate spray — Use 1¼ to 1½ gallons combined with 1 to 1½ gallons sticker per acre and apply as above. Note: Use 1½ gallons per acre through swelling buds and reduce to 1¼ gallons in popcorn stage. When bud blight is a problem, apply the maximum rate shown above after most of the leaves have fallen, usually in November and December, but ahead of fall rains.

Avocados — Anthracnose, Scab, Blotch (Cercospora spot) — Use 3 pints per 100 gallons water. Begin treatment when blossom buds open. Repeat at monthly intervals making last spray 140 days after bloom. Addition of a spreader-sticker such as Nu-Film 17, Triton B-1956, or similar types at their manufacturer's recommended rate will enhance disease control effectiveness.

Berries (Blackberries, Boysenberries, Dewberries, Loganberries, Raspberries): Anthracnose — Use 1 quart per 100 gallons of water. Begin spray when leaf buds begin to open. Repeat when flower buds show white and continue at 10 to 14 day intervals. Leaf and Cane spot and Yellow rust — In spring sprays use 1 quart per 100 gallons of water and apply when leaf buds begin to open and repeat when flower buds show white. Also make a post-harvest spray after pruning, but before fall rains begin to fall, using 3 quarts per 100 gallons water combined with 1 to 1½ gallons sticker.

Cherries (Sour): Brown rot, Blossom blight — Use 2 to 2½ quarts plus $\frac{1}{2}$ to 1 gallon spreader-sticker. Apply at popcorn and late bloom spray add 5 lbs. fresh hydrated spray lime per 100 gallons. For 2½ quarts plus 5 lbs. of spray lime per 100 gallons applied at petal fall use 2 to 2½ quarts per 100 gallons plus $\frac{1}{2}$ to 1 gallon sticker and spray.

Citrus: Brown rot — Use 1 pint per 100 gallons water by dilute spray in 75 gallons water by concentrate sprays. In areas where crop previously occurred add $\frac{1}{2}$ lb. of fresh high quality spray lime for each Basic Copper used. Apply at first indication of rain or first application. Repeat as needed to protect during wet weather.

Citrus (Florida and Texas) — Melanose and Greasy spot (or pink-pit) — Use 1½ pints per 100 gallons water by dilute spray. With aerial application use 5 to 8 quarts per acre diluted to the proper concentration. If a sprayer used, but do not use less than 10 gallons per acre. For melanose, repeat to 3 weeks after petal fall. Repeat 4 weeks later if necessary. For greasy spot (pitting) make a summer spray (June to July). Sulfur, wettable or soluble, is included in sprays for melanose. A spreader-sticker may be added.

Citrus (Florida only) — limes — Red Alga — Mix 1½ pints per 100 gallons water as a dilute ground spray. Apply in the early summer (June) and repeat in late summer (early August) to control new colonies. A spreader-sticker added if desired.

Filberts — Filbert or Bacterial blight — Mix 3 quarts in 100 gallons water with suitable spreader-sticker and apply by dilute ground spray. Make first application in August or early September before first heavy fall rains. If heavy rains occur and early winter, repeat application when $\frac{1}{4}$ of leaves have fallen.

Grapes: Anthracnose, Black rot, Downy mildew — Dilute spray in 100 gallons water. Make first application when new growth is $\frac{1}{2}$ inch long. Repeat 10 to 14 days. Concentrate spray — Use 2 to 2½ quarts per acre. Repeat for good coverage and apply as stated above.

Mangos — Anthracnose — Mix 3 pints per 100 gallons water with suitable spreader-sticker. Repeat weekly until fruit set and monthly through September. This will require about 12 applications. Addition of a spreader-sticker, such as Nu-Film 17, Triton B-1956 or similar types at their manufacturer's recommended rate will enhance disease control.

Olives: Leaf spot (Peacock spot) — Use 2 to 2½ quarts per 100 gallons water. Apply late October. Note: In areas with 10 inches or less rainfall per year use 100 gallons. Concentrate sprays — Use 1½ gallon per acre in 25 gallons water. Read and follow above note on rainfall limitation.

KEEP OUT OF REACH OF CHILDREN.
IF SWALLOWED.

WARNING

FOR PRACTICAL TREATMENT

Washes of water or milk and induce vomiting with finger or blunt object. Do not induce vomiting by mouth to an unconscious person.

Hold water for at least 15 minutes, holding attention immediately.

Additional precautionary statements.

Service Company
Perhill Operations
Perhill, Tennessee

EPA Est. No.

_____ Gallons

Cherries (Sour): Brown rot, Blossom blight — Use 2 to 2½ quarts per 100 gallons water plus ½ to 1 gallon spreader-sticker. Apply at popcorn and late bloom stages. In late bloom spray add 5 lbs. fresh hydrated spray lime per 100 gallons. For Leaf spot apply 2 to 2½ quarts plus 5 lbs. of spray lime per 100 gallons applied at petal fall. For Shot hole — Use 2 to 2½ quarts per 100 gallons plus ½ to 1 gallon sticker and apply as a dormant spray.

Citrus: Brown rot — Use 1 pint per 100 gallons water by dilute spray or ¼ gallon per acre in 75 gallons water by concentrate sprays. In areas where copper spray injury has previously occurred add ½ lb. of fresh high quality spray lime for each lb. of Flowable Tri-Basic Copper used. Apply at first indication of rain or first appearance of Brown rot. Repeat as needed to protect during wet weather.

Citrus (Florida and Texas) — Melanose and Greasy spot (or pink-pitting of grapefruit) — Use 1½ pints per 100 gallons water by dilute spray. With aerial or concentrate sprays use 5 to 8 quarts per acre diluted to the proper concentration for the specific type sprayer used, but do not use less than 10 gallons per acre. For melanose control apply 1 to 3 weeks after petal fall. Repeat 4 weeks later if necessary. For greasy spot (or pink-pitting) make a summer spray (June to July). Sulfur, wettable or flowable, may be included in sprays for melanose. A spreader-sticker may be added if desired.

Citrus (Florida only) — Limes — Red Alga — Mix 1½ pints per 100 gallons of water; applied as a dilute ground spray. Apply in the early summer (June) as a preventative spray. Repeat in late summer (early August) to control new colonies. A spreader-sticker may be added if desired.

Filberts — Filbert or Bacterial blight — Mix 3 quarts in 100 gallons of water adding a suitable spreader-sticker and apply by dilute ground spray. Make first application in late August or early September before first heavy fall rains. If heavy rains continue during fall and early winter, repeat application when ¾ of leaves have dropped.

Grapes: Anthracnose, Black rot, Downy mildew — Dilute spray — Use 1 quart per 100 gallons water. Make first application when new growth is ½ inch long and repeat every 10 to 14 days. Concentrate spray — Use 2 to 2½ quarts per acre in sufficient water for good coverage and apply as stated above.

Mangoes — Anthracnose — Mix 3 pints per 100 gallons water. Begin treatment when panicles are about 2 inches long. Repeat weekly until fruit set and then continue sprays monthly through September. This will require about 12 applications. Addition of a spreader-sticker, such as Nu-Film 17, Triton B-1956 or similar types at their manufacturer's recommended rate will enhance disease control.

Olive: Leaf spot (Peacock spot) — Use 2 to 2½ quarts per 100 gallons water and apply in late October. Note: In areas with 10 inches or less rainfall per year, use only 1 quart per 100 gallons. Concentrate sprays — Use 1½ gallon per acre in not less than 40 gallons water. Read and follow above note on rainfall limitation.

Peaches and Nectarines: Peach blight (Shot hole), Leaf curl and Brown rot, Blossom and Twig blight — Dilute spray — Use 2 to 3 quarts per 100 gallons water plus 1 to 1½ gallons sticker. Concentrate sprays — Use 1½ to 2 gallons per acre plus 1 to 1½ gallon sticker in 25 to 50 gallons water per acre. The fall dormant spray for Leaf curl and Shot hole must be applied before the fall rains begin — usually from November 15 to December 15. Spring bud sprays for Brown rot, Leaf curl, and Shot hole should be applied before the foliage buds swell and again in full pink bud stage. Do not apply after pink bud stage or damage to the flowers may result. (Optimum spray time to control Brown rot is the spray at full pink bud stage.) For Leaf curl control application must be made before foliage buds swell. Consult your State Agricultural Experiment Station. To aid in control of peach Bacterial spot, apply 3 pints per 100 gallons water plus sticker after leaves begin to fall for dormant season.

California only: For Blight and Leaf curl control — 2 to 2½ gallons in 20 gallons of water with sticker may be applied by aircraft to one acre during dormant season.

Pears — Fire blight (Western U.S.) — Use ½ pint per 100 gallons of water. Apply 400 gallons spray per acre. With concentrate sprays use 2 pints per acre in recommended quantities of water. Apply at 10% bloom and repeat at 5 to 7 day intervals during bloom. Do not use on D'Anjou, Comice, or Seckel varieties.

Plums and Prunes: Brown rot, Shot hole — Use 2 to 2½ quarts plus 1 to 1½ gallon sticker per 100 gallons water. For Shot hole control apply as a dormant in November or December before heavy fall rains begin. For Brown rot control apply at early green bud or full popcorn stages. Concentrate spray — Use 1½ gallons plus 1 to 1½ gallons sticker in 25 to 50 gallons water and apply to one acre.

California only: For aircraft spray to control Shot hole and Brown rot blossom blight apply 2 to 2½ gallons plus sticker in 20 gallons water and apply to one acre during dormant season.

Walnuts — Bacterial blight (Western U.S.) — Apply 1½ gallons per acre. In concentrate sprays use 100 gallons spray per acre. Make two treatments, the first in early prebloom (1% pistillate, not catkin, blooms showing) and the second in late prebloom when 10 to 20% pistillate, not catkin, blooms are showing. Repeat applications for blight control 3 to 4 times during the growing season if necessary to control disease.

VEGETABLE AND FIELD CROPS

Mixing Instructions: Mix recommended amounts of Flowable Tri-Basic for one acre in sufficient water for good coverage with each type of sprayer. With dilute ground sprayer, generally apply 20 to 50 gallons spray per acre. With concentrate sprayers generally apply 20 to 50 gallons spray per acre. With aerial sprayers generally apply 5 to 10 gallons spray per acre, but do not use less than 5 gallons spray mixture per acre. Consult the manufacturer for recommended water volumes per acre for a given sprayer.

Beans (Green and dry): Bacterial blights — Apply 1 to 2 quarts per acre. Begin treatment when disease is first expected and repeat at 7 to 10 day intervals until harvest of green beans or up to 6 sprays on dry beans.

Carrots: Downy mildew — Use 1 quart per acre. Begin treatment when disease is first expected or when first appears.

Celery — Early blight — Use 1 quart per acre. Begin treatment when disease is first expected or when first appears. Control tank-mix Flowable Tri-Basic at labeled rates as the rate used alone at labeled rate.

Cucurbits (cucumbers, melons, squash) — Mildew — Use 1 quart per acre. Begin treatment when disease is first expected or when first appears.

Onions: Purple blotch — Use 1 quart per acre. Begin treatment when disease is first expected or when first appears.

Peanuts: Cercospora leaf spot — Use 1 quart per acre. Begin treatment when disease is first expected or when first appears.

Peppers — Bacterial blight — Use 1 quart per acre. Begin treatment when disease is first expected or when first appears.

Potatoes: Early and late blight — Use 1 quart per acre. Begin treatment when disease is first expected or when first appears.

Spinach: Anthracnose — Use 1 quart per acre. Begin treatment when disease is first expected or when first appears.

Sugar Beets: Cercospora leaf spot — Use 1 quart per acre. Begin treatment when disease is first expected or when first appears.

Tomatoes: Bacterial blight — Use 2 to 4 pints per acre. Begin treatment when disease is first expected or when first appears. Repeat at 7 to 10 day intervals. Use Flowable Tri-Basic M-45, Bravo, Dithane M-45, or other products used in mixture at labeled rate of Dithane M-45 Tri-Basic Copper.

Rice: Seedrot and sheath blight — Use 1 quart per acre. Begin treatment when disease is first expected or when first appears. Flowable Tri-Basic Copper devices generally used for seed or food purposes.

Peaches and Nectarines: Peach blight (Shot hole), Leaf curl and Brown rot, Blossom and Twig blight — Dilute spray — Use 2 to 3 quarts per 100 gallons water plus 1 to 1½ gallons sticker. Concentrate sprays — Use 1½ to 2 gallons per acre plus 1 to 1½ gallon sticker in 25 to 50 gallons water per acre. The fall dormant spray for Leaf curl and Shot hole must be applied before the fall rains begin — usually from November 15 to December 15. Spring bud sprays for Brown rot, Leaf curl, and Shot hole should be applied before the foliage buds swell and again in full pink bud stage. Do not apply after pink bud stage or damage to the flowers may result. (Optimum spray time to control Brown rot is the spray at full pink bud stage.) For Leaf curl control application must be made before foliage buds swell. Consult your State Agricultural Experiment Station. To aid in control of peach Bacterial spot, apply 3 pints per 100 gallons water plus sticker after leaves begin to fall for dormant season.

California only: For Blight and Leaf curl control — 2 to 2½ gallons in 20 gallons of water with sticker may be applied by aircraft to one acre during dormant season.

Pears — Fire blight (Western U.S.) — Use ½ pint per 100 gallons of water. Apply 400 gallons spray per acre. With concentrate sprays use 2 pints per acre in recommended quantities of water. Apply at 10% bloom and repeat at 5 to 7 day intervals during bloom. Do not use on D'Anjou, Comice, or Seckel varieties.

Plums and Prunes: Brown rot, Shot hole — Use 2 to 2½ quarts plus 1 to 1½ gallon sticker per 100 gallons water. For Shot hole control apply as a dormant in November or December before heavy fall rains begin. For Brown rot control apply at early green bud or full popcorn stages. Concentrate spray — Use 1½ gallons plus 1 to 1½ gallons sticker in 25 to 50 gallons water and apply to one acre.

California only: For aircraft spray to control Shot hole and Brown rot blossom blight apply 2 to 2½ gallons plus sticker in 20 gallons water and apply to one acre during dormant season.

Walnuts — Bacterial blight (Western U.S.) — Apply 1½ gallons per acre. In concentrate sprayers use 100 gallons spray per acre. Make two treatments, the first in early prebloom (1% pistillate, not catkin, blooms showing) and the second in late prebloom when 10 to 20% pistillate, not catkin, blooms are showing. Repeat applications for blight control 3 to 4 times during the growing season if necessary to control disease.

VEGETABLE AND FIELD CROPS

Mixing Instructions: Mix recommended amounts of Flowable Tri-Basic for one acre in sufficient water for good coverage with each type of sprayer. With dilute ground sprayer, generally apply 20 to 50 gallons spray per acre. With concentrate sprayers generally apply 20 to 50 gallons spray per acre. With aerial sprayers generally apply 5 to 10 gallons spray per acre, but do not use less than 5 gallons spray mixture per acre. Consult the manufacturer for recommended water volumes per acre for a given sprayer.

Beans (Green and dry): Bacterial blights — Apply 1 to 2 quarts per acre. Begin treatment when disease is first expected and repeat at 7 to 10 day intervals until harvest of green beans or up to 6 sprays on dry beans.

Carrots: Downy mildew, Cercospora and Alternaria leaf blight — Use 1½ to 2 quarts per acre. Begin treatment when disease first appears and repeat at 7 to 10 day intervals.

Celery — Early blight — Use 2 quarts per acre. Begin treatment when disease is first expected or first appears. Repeat at 7 day intervals up to harvest. Note: For best disease control tank-mix Flowable Tri-Basic with Bravo, Dithane M-45, Maneb, or Manzate, all at labeled rates as the tank-mix will improve disease control over any of these products used alone at labeled rates.

Cucurbits (cucumbers, squash, watermelons, cantaloupes) — Downy mildew, Powdery mildew — Use 1 quart per acre. Begin spray treatment 2 weeks weekly before disease is first expected or when it first appears and repeat weekly as long as needed to control diseases.

Onions: Purple blotch (California only) and Downy mildew — Use 1½ to 2 quarts per acre. Begin when plants are 4 to 6 inches and repeat at 7 to 10 day intervals.

Peanuts: Cercospora leaf spot — Use 1 to 1½ quarts per acre. Begin when disease is first expected or appears. Repeat at 10 to 14 day intervals. Note: The addition of 2 lbs. of wettable or flowable sulfur per acre in a tank-mix will enhance leaf spot control.

Peppers — Bacterial spot — Use 3 to 4 pints per acre. Start sprays in seedbed or field and continue at 7 day intervals. Note: It is very important that sprays begin before disease appears and continue sprays during the crucial fruiting period for best control.

Potatoes: Early and Late blights — Use 1½ to 3 quarts per acre. Begin when plants emerge and repeat at 7 to 10 day intervals.

Spinach: Anthracnose, Cercospora leaf spot, Downy mildew, White rust — Use 1 to 2 quarts per acre. Begin when disease first appears. Repeat at 7 to 10 day intervals.

Sugar Beets: Cercospora leaf spot — Use 2 quarts per acre. Begin when disease first appears and repeat every 7 to 10 days.

Tomatoes: Bacterial spot, Bacterial canker (Southeastern States Only), Early and Late Blight — Use 2 to 4 pints per acre. Begin in seedbed or field before disease first appears. Repeat at 7 to 10 day intervals. Note: Flowable Tri-Basic is usually tank-mixed with Bravo, Dithane M-45, Maneb, Manzate 200, or Dyrene all at labeled rates to control a broad range of tomato diseases. Observe all cautions and limitations on the label of all products used in mixtures. For Bacterial speck use 2 pints per acre plus the recommended rate of Dithane M-45, Manzate 200 or Maneb for best control, or use 4 pints Flowable Tri-Basic Copper.

SEED TREATMENT

Rice: Seedrot and damping off — (Water planted) — Apply a slurry containing ¼ pint Flowable Tri-Basic Copper to each 100 lbs. of rice seed using various tumblers or mixing devices generally used to treat seeds with powdered pesticides. Do not use treated seed for feed or food purposes.