

TOPSIN-M

THIOPHANATE-METHYL FUNGICIDE 70% Wettable Powder

ACTIVE INGREDIENT: Thiophanate methyl (dimethyl(1,2-phenylene)bis(minocarbonothioyl)bis(carbamate))* 70%
INERT INGREDIENTS 30%
TOTAL 100%

*Also known as dimethyl 4,4'-o-phenylenebis[3-thioallophanate]

TOPSIN is a registered trademark of Nippon Soda Company, Ltd., and is licensed to Pennwalt Corporation U.S. Patent Pending

**KEEP OUT OF REACH OF CHILDREN
CAUTION**

PRECAUTIONARY STATEMENTS HAZARD TO HUMANS AND DOMESTIC ANIMALS

May Be Harmful If Swallowed, Inhaled, Or Absorbed Through Skin

Avoid contact with eyes, skin, or clothing. Avoid breathing of dust or spray mist. Wash thoroughly with soap and water after handling. Wash contaminated clothing before reuse. Do not contaminate feed or food. Keep children and pets out of treated areas until material is completely dry.

Statement of Practical Treatment

If swallowed, induce vomiting with 1 cup of water. Call a physician immediately. If on skin, wash immediately with soap and water. If in eyes, flush immediately with plenty of water.

ENVIRONMENTAL HAZARD

Keep out of lakes, streams, or ponds. Do not apply where runoff is likely to occur. Do not apply when weather conditions favor drift from treated areas. Do not contaminate water by cleaning of equipment or disposal of wastes.

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage, disposal, or cleaning of equipment. Open dumping is prohibited. Pesticide, spray mixture, or residue that cannot be used or chemically reprocessed should be disposed of in a landfill approved for pesticides or buried in a safe place away from water supplies.

Dispose of in an incinerator or landfill approved for pesticide containers or bury in a safe place. Consult Federal, State, or local disposal authorities for approved alternative procedures such as limited open burning.

DIRECTIONS FOR USE. See accompanying brochure located on the rear of this package.

EPA REGISTRATION NO. 4561-322
EPA ESTABLISHMENT NO. 8033-JP-1

PENNWALT
CORPORATION

Net Weight 2 lbs.

Sold By
AGCHEM DIVISION—PENNWALT CORPORATION

Made in Japan

Philadelphia, PA
6-9177A-04A1

8-1 in U.S.A.

POWDERY MILDEW—Use same schedule as for *Monilinia* BROWN ROT BLOSSOM BLIGHT plus applications of 6 to 8 ounces TOPSIN M per 100 gallons at shuck fall and first cover.

APRICOTS and NECTARINES—*Monilinia* BROWN ROT BLOSSOM BLIGHT—Apply 8 ounces TOPSIN M per 100 gallons at early bloom and again at full bloom.

Monilinia FRUIT BROWN ROT—In addition to bloom sprays, apply 1 or 2 applications of TOPSIN M at 8 ounces per 100 gallons starting 3 weeks before harvest. If needed under severe disease pressure, apply additional sprays at 10 to 14 day intervals between full bloom and final preharvest sprays. Do not apply within 1 day of harvest.

PRUNES and PLUMS—*Monilinia* BROWN ROT BLOSSOM BLIGHT—Apply 8 ounces TOPSIN M per 100 gallons at early bloom and again at full bloom.

Monilinia FRUIT BROWN ROT—In addition to bloom sprays, apply 1 or 2 applications at 8 ounces per 100 gallons starting 3 weeks before harvest. If needed under severe disease pressure, apply additional sprays at 10 to 14 day intervals between full bloom and final pre-harvest sprays. Do not apply within 1 day of harvest.

BLACK KNOT—Apply 8 ounces TOPSIN M per 100 gallons at pre-bloom, petal fall and at first, second and third cover sprays at 10 to 14 day intervals. Do not apply within 1 day of harvest.

Coccomyces LEAF SPOT—Apply 8 ounces TOPSIN M per 100 gallons at petal fall, shuck, and at first, second and third cover sprays at 10 to 14 day intervals and 1 spray 14 to 21 days after harvest. Do not apply within 1 day of harvest.

POSTHARVEST

PEACHES, APRICOTS, CHERRIES, NECTARINES, PLUMS, and PRUNES—*Monilinia* FRUIT BROWN ROT—Dip or spray fruit thoroughly as soon as possible after harvest, use 12 to 16 ounces of TOPSIN M per 100 gallons of water (equal to 630 to 840 ppm active ingredient). Maximum postharvest treatment time is 1 minute. TOPSIN M will not control fruit rots caused by *Rhizopus* spp. and *Alternaria* spp.

STRAWBERRIES—*Dendrophoma* LEAF BLIGHT, *Diplocarpon* LEAF SCORCH, *Botrytis* FRUIT ROT—Apply TOPSIN M at .75 to 1 pound per application per acre. Begin applications at early bloom and continue at 7 to 10 day intervals. Use the higher rate in Eastern United States and under conditions of severe disease pressure. Do not apply within 1 day of harvest.

SUGAR BEETS—LEAF SPOT (*Cercospora* sp.)—Apply 6 to 8 ounces of TOPSIN M per acre in sufficient water for thorough coverage. Begin applications when disease first appears and repeat at 14 to 21 day intervals as needed. Do not apply within 21 days of harvest.

SUGAR CANE (Hawaii only)—PINEAPPLE DISEASE—(*Thielaviopsis* sp. or *Ceratocystis* sp.)—Apply TOPSIN M to cut seed pieces either as a cold or hot dip.

Cold Dip—Use 8 ounces of TOPSIN M per 100 gallons of water (1:1,600). Immerse seed pieces to provide thorough coverage; remove and allow to drain.

Hot Dip—Use 4 ounces of TOPSIN M per 100 gallons of water (1:3,200). Maintain temperature of dip at 120°C and soak seed pieces for 20 minutes; remove and allow to drain.

Do not use treated seed pieces for food, feed, or for grazing or feed treated forage to livestock.

5-9177B-04A1

PENWALT
CORPORATION

ACCEPTED
JAN 30 1961
Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 4381-322

Apply TOPSIN M in sufficient volume of required amount of mechanical or hydraulic required amount of keep the material in containing material Bordeaux mixture of other pesticides is tions of severe dis sion Service recom **IMPORTANT:** If, a treatment is not effective (consult your State Agricultural Extension Service suitable fungicide.

It is a violation of consistent with it

me schedule as for *Monilinia*
BHT plus applications of 6 to 8
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ES—*Monilinia* BROWN ROT
ounces TOPSIN M per 100
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—In addition to bloom sprays,
PSIN M at 8 ounces per 100
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additional sprays at 10 to 14
n and final preharvest sprays.
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nia BROWN ROT BLOSSOM
IN M per 100 gallons at early

—In addition to bloom sprays,
ces per 100 gallons starting 3
under severe disease pres-
0 to 14 day intervals between
sprays. Do not apply within 1

TOPSIN M per 100 gallons at
second and third cover sprays
apply within 1 day of harvest.

8 ounces TOPSIN M per 100
first, second and third cover
d 1 spray 14 to 21 days after
of harvest.

POSTHARVEST

PEACHES, APRICOTS, CHERRIES, NECTARINES, PLUMS,
and **PRUNES—*Monilinia* FRUIT BROWN ROT**—Dip or spray
fruit thoroughly as soon as possible after harvest, use 12 to 16
ounces of TOPSIN M per 100 gallons of water (equal to 630 to
840 ppm active ingredient). Maximum postharvest treatment
time is 1 minute. TOPSIN M will not control fruit rots caused by
Rhizopus spp. and *Alternaria* spp.

**STRAWBERRIES—*Dendrophoma* LEAF BLIGHT, *Diplocar-*
pon LEAF SCORCH, *Botrytis* FRUIT ROT**—Apply TOPSIN M at
.75 to 1 pound per application per acre. Begin applications at
early bloom and continue at 7 to 10 day intervals. Use the
higher rate in Eastern United States and under conditions of
severe disease pressure. Do not apply within 1 day of harvest.

SUGAR BEETS—LEAF SPOT (*Cercospora* sp.)—Apply 6 to 8
ounces of TOPSIN M per acre in sufficient water for thorough
coverage. Begin applications when disease first appears and
repeat at 14 to 21 day intervals as needed. Do not apply within
21 days of harvest.

**SUGAR CANE (Hawaii only)—PINEAPPLE DISEASE—(*Thie-*
laviopsis sp. or *Ceratocystis* sp.)**—Apply TOPSIN M to cut
seed pieces either as a cold or hot dip.

Cold Dip—Use 8 ounces of TOPSIN M per 100 gallons of water
(1:1,600). Immerse seed pieces to provide thorough coverage;
remove and allow to drain.

Hot Dip—Use 4 ounces of TOPSIN M per 100 gallons of water
(1:3,200). Maintain temperature of dip at 120° F and soak seed
pieces for 20 minutes; remove and allow to drain.

Do not use treated seed pieces for food, feed, or for
graze or feed treated forage to livestock.

5-9177B-0/A1

PENWALT
CORPORATION

ACCEPTED
JAN 30 1961
Under the Federal Insecticide,
Fungicide, and Rodenticide Act,
as amended, for the pesticide
registered under
EPA Reg. No. 4581-322

TOPSIN-M
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EPA REGISTRATION NO. 4581-322

GENERAL INFORMATION

Apply TOPSIN M with ground or aerial equipment, using
sufficient volume of spray to provide thorough coverage. Add
required amount of TOPSIN M to partially filled tank agitated by
mechanical or hydraulic means and then add remaining
required amount of water. Continuous agitation is required to
keep the material in suspension. Do not tank mix with copper-
containing materials or with highly alkaline pesticides, such as
Bordeaux mixture or lime sulfur. No claim of compatibility with
other pesticides is implied. Use the higher rates under condi-
tions of severe disease pressure. Also, see local State Exten-
sion Service recommendations for application schedules.

IMPORTANT: If, after using TOPSIN M as recommended,
treatment is not effective, a tolerant strain of fungi may be pre-
sent (consult your local Pennwalt representative). Consult your
State Agricultural Experiment Station or your State Agricultural
Extension Service for advice on the prompt use of some other
suitable fungicide.

DIRECTIONS FOR USE

GENERAL CLASSIFICATION

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

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ALMONDS—BROWN ROT BLOSSOM BLIGHT (*Monilinia* sp.)—Apply 1.5 to 2 pounds of TOPSIN M per acre in sufficient water for thorough coverage at early pink bud and early petal fall. For aerial or concentrated sprays, use an equivalent amount per acre in an amount of water appropriate for the application equipment.

APPLES—SCAB (*Venturia* sp.), **POWDERY MILDEW** (*Podosphaera* sp.), **SOOTY BLOTCH** (*Gloeodes* sp.), **FLY SPECK** (*Microthyriella* sp.), **BITTER ROT** (*Gloeosporium* sp.), and **BLACK ROT** (*Physalospora* sp.)—Apply 1 to 1.5 pounds of TOPSIN M per acre in sufficient water for thorough coverage at 5 to 10 day intervals from green tip through petal fall; continue at 7 to 14 day intervals in cover sprays.

NOTE: For control of APPLE diseases in the Southeastern States of Florida, Georgia, South Carolina, North Carolina, and Alabama, use 3 to 4 pounds of TOPSIN M per acre.

APPLES—POSTHARVEST FRUIT ROTS (*Botrytis* sp., *Penicillium* spp., and *Gloeosporium* sp.)—Dip or spray fruit thoroughly as soon as possible after harvest; use 8 to 16 ounces of TOPSIN M per 100 gallons of water (equal to 420 to 840 ppm a.i.). Do not dip for more than 2 minutes. Double the concentration of TOPSIN M when incorporated in wax and applied in flow-through sprays to the fruit.

BEANS—WHITE ROT (*Sclerotinia* sp.) and **GRAY MOLD** (*Botrytis* sp.)—Apply 1.5 to 2 pounds of TOPSIN M per acre in sufficient water for thorough coverage once at 50% to 70% bloom. Or, apply 1 to 1.5 pounds of TOPSIN M per acre twice with the first application when 10% to 30% of the plants have an open blossom and a second application 4 to 7 days later or at peak bloom. Do not apply to snap or dry beans within 14 days of harvest, or to lima beans within 28 days of harvest.

CELERY—EARLY BLIGHT (*Cercospora* sp.) and **LATE BLIGHT** (*Septoria* sp.)—Apply 8 ounces of TOPSIN M per acre in sufficient water for thorough coverage at the base of the plants on a 14 to 21 day schedule beginning about 2 weeks after transplanting. Or, apply 8 ounces of TOPSIN M per acre in sufficient water for thorough coverage as a foliage spray every 7 to 14 days beginning about 2 weeks after transplanting. Do not apply within 7 days of harvest. Do not make more than 4 applications per season.

PEANUTS—LEAF SPOT (*Cercospora* spp.)—Apply 8 ounces of TOPSIN M per acre in sufficient water for thorough coverage. Begin applications 35 days after planting or when disease first appears and repeat at 14 to 21 day intervals as needed. Use the 14 day interval under severe disease conditions. Do not apply within 14 days of harvest.

PECANS—SCAB (*Fusicladium* sp.), **BROWN SPOT** (*Cercospora* sp.), **DOWNY SPOT** (*Mycosphaerella* sp.), and **POWDERY MILDEW** (*Micosphaera* sp.)—Apply 8 to 16 ounces of TOPSIN M per acre in sufficient water for thorough coverage; use the higher rate for trees over 30 ft. tall and for aerial application in Arkansas, Louisiana, Mississippi, Oklahoma and Texas. Begin applications when first leaves are showing and repeat at 3 to 4 week intervals until shuck split. Do not apply after shuck split.

SOYBEANS—ANTHRACNOSE (*Colletotrichum* sp.), **BROWN LEAF SPOT** (*Septoria* sp.), **FROG-EYE LEAF SPOT** (*Cercospora* sp.), **PURPLE SEED STAIN** (*Cercospora* sp.), and **POD AND STEM BLIGHT** (*Diaporthe* sp. and the imperfect stage, *Phomopsis* sp.)—Apply 8 to 16 ounces of TOPSIN M per acre in sufficient water for thorough coverage. Apply when pods are 1/8 inch to 1/4 inch in length. Make one additional application 10 to 14 days later. Do not make more than 2 applications per

year. Use the high rate for grazing or feed treatment.

STONE FRUITS—

PEACHES—Monilia—Apply 8 to 12 ounces of TOPSIN M per 100 gallons of water at 10 to 14 day intervals starting 3 weeks before bloom and again at full bloom. **Monilia FRUIT BLIGHT**—Apply 1 or 2 preharvest sprays of 8 to 16 ounces of TOPSIN M per 100 gallons (see note) needed under severe conditions. **NOTE:** For Florida, Georgia, Mississippi and Alabama, use 3 to 4 pounds of TOPSIN M per acre. **PEACH SCAB**—Use 8 to 16 ounces of TOPSIN M per 100 gallons of water.

CHERRIES—Monilia—Apply 8 ounces of TOPSIN M per 100 gallons of water at 10 to 14 day intervals starting 3 weeks before bloom.

Monilia FRUIT BLIGHT—Apply 1 or 2 sprays of 8 to 16 ounces of TOPSIN M per 100 gallons (see note) needed under severe conditions. **NOTE:** For Florida, Georgia, Mississippi and Alabama, use 3 to 4 pounds of TOPSIN M per acre. **COCCOMYCEA CHERRY**—Apply 8 to 16 ounces of TOPSIN M per 100 gallons of water at 10 to 14 day intervals starting 3 weeks before bloom and again at full bloom. Do not apply within 1 day of harvest.

BLOSSOM BLIGHT (*Monilinia* spp.)—Apply 8 ounces of TOPSIN M per acre in sufficient water for thorough coverage at the base of the plants on a 14 to 21 day schedule beginning about 2 weeks after transplanting. Or, apply 8 ounces of TOPSIN M per acre in sufficient water for thorough coverage as a foliage spray every 7 to 14 days beginning about 2 weeks after transplanting. Do not apply within 7 days of harvest. Do not make more than 4 applications per season.

POWDERY MILDEW (*Podosphaera* spp.), **FLY SPECK** (*Gloeosporium* spp.), and **ROT** (*Gloeosporium* spp.)—Apply 1 to 1.5 pounds of TOPSIN M per acre in sufficient water for thorough coverage at the tip through petal fall; continue applications as needed.

These diseases in the Southeastern United States, North Carolina, and South Carolina use 12 ounces of TOPSIN M per acre.

FRUIT ROTS (*Botrytis* spp., *Penicillium* spp.)—Dip or spray fruit thoroughly before harvest; use 8 to 16 ounces of TOPSIN M per acre in sufficient water (equal to 420 to 840 ppm) for 2 minutes. Double the concentration in wax and applied in flow.

GRAY MOLD (*Botrytis* spp.) and **GRAY MOLD** (*Botrytis* spp.)—Apply 8 to 16 ounces of TOPSIN M per acre in sufficient water for thorough coverage once at 50% to 70% pod maturity. Apply 8 to 16 ounces of TOPSIN M per acre twice at 10% to 30% of the plants have pods application 4 to 7 days later or to snap or dry beans within 14 days within 28 days of harvest.

CELERY—**EARLY BLIGHT** (*Cercospora* spp.) and **LATE BLIGHT** (*Septoria* spp.)—Apply 8 ounces of TOPSIN M per acre in sufficient water for thorough coverage at the base of the plants on a 14 to 21 day schedule beginning about 2 weeks after transplanting. Or, apply 8 ounces of TOPSIN M per acre in sufficient water for thorough coverage as a foliage spray every 7 to 14 days beginning about 2 weeks after transplanting. Do not apply within 7 days of harvest. Do not make more than 4 applications per season.

PEANUTS—**LEAF SPOT** (*Cercospora* spp.)—Apply 8 ounces of TOPSIN M per acre in sufficient water for thorough coverage. Begin applications 35 days after planting or when disease first appears and repeat at 14 to 21 day intervals as needed. Use the 14 day interval under severe disease conditions. Do not apply within 14 days of harvest.

PECANS—**SCAB** (*Fusicladium* spp.), **BROWN SPOT** (*Cercospora* spp.), **DOWNY SPOT** (*Mycosphaerella* spp.), and **POWDERY MILDEW** (*Mycosphaerella* spp.)—Apply 8 to 16 ounces of TOPSIN M per acre in sufficient water for thorough coverage; use the higher rate for trees over 30 ft. tall and for aerial application in Arkansas, Louisiana, Mississippi, Oklahoma and Texas. Begin applications when first leaves are showing and repeat at 3 to 4 week intervals until shuck split. Do not apply after shuck split.

SOYBEANS—**ANTHRACNOSE** (*Colletotrichum* spp.), **BROWN LEAF SPOT** (*Septoria* spp.), **FROG-EYE LEAF SPOT** (*Cercospora* spp.), **PURPLE SEED STAIN** (*Cercospora* spp.), and **POD AND STEM BLIGHT** (*Diaporthe* spp. and the imperfect stage, *Phomopsis* spp.)—Apply 8 to 16 ounces of TOPSIN M per acre in sufficient water for thorough coverage. Apply when pods are 1/8 inch to 1/4 inch in length. Make one additional application 10 to 14 days later. Do not make more than 2 applications per

year. Use the high rate under severe disease conditions. Do not graze or feed treated vines or hay to livestock.

STONE FRUITS—PREHARVEST

PEACHES—**Monilinia BROWN ROT BLOSSOM BLIGHT**—Apply 8 to 12 ounces TOPSIN M per 100 gallons at early bloom and again at full bloom (see note).

Monilinia FRUIT BROWN ROT—In addition to bloom sprays, apply 1 or 2 preharvest sprays at 8 to 12 ounces TOPSIN M per 100 gallons (see note) starting 3 weeks before harvest. If needed under severe disease pressure, apply additional sprays at 10 to 14 day intervals between full bloom and final preharvest sprays. Do not apply within 1 day of harvest.

Note: For Florida, Georgia, South Carolina, North Carolina, Mississippi and Alabama use 12 ounces per 100 gallons.

PEACH SCAB—Use same schedule as for **Monilinia BROWN ROT BLOSSOM BLIGHT** plus application of 6 to 8 ounces TOPSIN M per 100 gallons at shuck split and at first cover spray.

CHERRIES—**Monilinia BROWN ROT BLOSSOM BLIGHT**—Apply 8 ounces TOPSIN M at early bloom and again at full bloom.

Monilinia FRUIT BROWN ROT—In addition to bloom sprays, apply 1 or 2 sprays at 8 ounces TOPSIN M per 100 gallons starting 3 weeks before harvest. If needed under severe disease pressure, apply additional sprays at 10 to 14 day intervals between full bloom and final preharvest sprays. Do not apply within 1 day of harvest.

Coccomyces CHERRY LEAF SPOT—Apply 6 to 8 ounces TOPSIN M per 100 gallons at petal fall or before, when leaves first unfold, and first, second and third cover at 10 to 14 day intervals and one spray 14 to 21 days after harvest. Do not apply within 1 day of harvest.

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