

53642-2 PM-21
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| US ENVIRONMENTAL PROTECTION AGENCY OFFICE OF PESTICIDES PROGRAMS REGISTRATION DIVISION (TS-767) WASHINGTON, DC 20460 | EPA REGISTRATION NO. 53642-2 | DATE OF ISSUANCE MAY 27 1987 |
| | TERM OF ISSUANCE | |
| NOTICE OF PESTICIDE: <input type="checkbox"/> REGISTRATION <input type="checkbox"/> REREGISTRATION (Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended) | | |
| NAME OF PESTICIDE PRODUCT S.N.-20 Disinfectant for Ornamental Horticulture | | |

NAME AND ADDRESS OF REGISTRANT (Include ZIP code)

R.D. & Associates
 P.O. Box 4068
 Whittier, CA 90707

NOTE: Changes in labeling formula differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above U.S. EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby Registered/Reregistered under the Federal Insecticide, Fungicide, and Rodenticide Act.

A copy of the labeling accepted in connection with this Registration/Reregistration is returned herewith.

Registration is in no way to be construed as an indorsement or approval of this product by this Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is conditionally registered in accordance with FIFRA section 3(c)(7)(A) provided that you:

1. Submit/cite all data required for registration/reregistration of your product under FIFRA section 3(c)(5) when the Agency requires all registrants of similar products to submit such data.
2. Add the phrase "EPA Registration No. 53642-2" to your label before you release the product for shipment.
3. Submit five (5) copies of your final printed labeling before you release the product for shipment. Refer to the A-79 enclosure for a further description of final printed labeling.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6(e). Your release for shipment of the product constitutes acceptance of these conditions.

A stamped copy of the label is enclosed for your records.



John H. Lee
 Product Manager (31)
 Disinfectants Branch
 Registration Division (TS-767C)

Enclosures

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ATTACHMENT IS APPLICABLE

| | |
|---------------------------------|------|
| SIGNATURE OF APPROVING OFFICIAL | DATE |
|---------------------------------|------|

2/14

Front Panel

S.N.-20 DISINFECTANT

FOR ORNAMENTAL HORTICULTURE

For Use Against Fungal, Bacterial, Algal
and Viral ~~Organisms~~ and Their Odors
Hant Pathogens

Stable--Mixes Readily with Water
Does Not Separate--A Good Wetting Agent
Leaves no Residual Marks on Foliage.
Biodegradable

S.N.-20 is a Concentrate and
Must be Diluted Before Using

In Use Dilutions--Odorless - Non-Flammable - Non-Corrosive - Non-Toxic

Active Ingredients:

n-Alkyl(60%C₁₄, 30%C₁₆, 5%C₁₂, 5%C₁₈)

dimethyl benzyl ammonium chloride..... 10%

n-Alkyl(68%C₁₂, 32%C₁₄) dimethyl

ethylbenzyl ammonium chloride 10%

Inert Ingredients: 80%
100%

EPA Reg. No. 53642-**1**

EPA Est. No. 53642-CA-1

KEEP OUT OF REACH OF CHILDREN (12 pt)

DANGER (18 pt)

See Side Panel for Additional Precautionary Statements

Net 1 gal.

R.D. & Associates
P.O. Box 4068
Whittier, CA 90607

ACCEPTED
with COMMENTS
In EPA Letter Dated:

MAY 28 1987

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Left Panel

PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS

DANGER

(18 pt)

Corrosive. Harmful or fatal if swallowed. Causes severe eye and skin damage. Do not get in eyes, on skin or on clothing. Wear goggles or face shield and rubber gloves when handling. Avoid contamination of food. Remove and wash contaminated clothing.

Statement of Practical Treatment

If swallowed: Drink milk, egg whites, gelatin solution or, if these are not available, drink large quantities of water. Call a physician.

If on skin: Flush skin with plenty of water for at least 15 minutes.

If in eyes: Flush eye with plenty of water for 15 minutes and call a physician.

If on clothing: Remove and wash all contaminated clothing before reuse.

Note to Physician: Probable mucosal damage may contraindicate the use of gastric lavage. Measures against circulatory shock, respiratory depressions and convulsions may be needed.

Storage and Disposal

(12 pt)

Do not contaminate water, food or feed by storage or disposal.
Open dumping is Prohibited.
Do Not Reuse Empty Container.

Pesticide Disposal: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

Container Disposal: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by State and local authorities, by burning. If burned stay out of smoke.

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Right Panel

Directions For Use

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

S.N.-20 is a general disinfectant for use on floral ornamentals. It will help to control fungal, bacterial and viral pathogens, bacterial and fungal leaf rots, slime forming fungi, odor-causing bacteria and algae.

S.N.-20 has been designed specifically for greenhouse and home use where cross contamination may occur between plants. Preclean all surfaces prior to application of disinfectant solution. All inanimate surfaces must be thoroughly wetted and remain wet for 10 minutes for disinfection. Fresh solution should be prepared daily and when use solution becomes visibly dirty.

Work Area and Benches:

Spray or swab working surfaces before each work period. Again after each plant is completed, to help control transfer of such diseases as root rot, crown rot, botrytis, mildew, etc. USE: 1 Tbsp S.N.-20 concentrate to 1 gallon water.

^A
Downy

Pots, Flats and Flower Buckets

Used pots and flats should be brushed or washed, then soak in S.N.-20 solution for 10 minutes before using to help control transfer of such diseases as root and crown rots, anthracnose, mildew, rusts and blight. USE: 1 Tbsp. S.N.-20 per gallon water.

^A

Disinfecting Cutting Tools

Soak cutting edge of tool for 10 minutes in S.N.-20 solution before use to help control transfer of such diseases as stem and root rots, Tobacco Mosaic Virus (TMV) and botrytis. Use wet tool on plants. At end of work, dry and oil tools. USE: 1 tsp. S.N.-20 concentrate per quart of water.

ALGAE - Greenhouse Glass

with SN20. Allow to air dry.
Spray or swab surfaces. Wash off dead algae with water. Spray clean surfaces again with S.N.-20 solution. USE: 1 tsp. S.N.-20 concentrate per gallon water.

ALGAE - Walkways

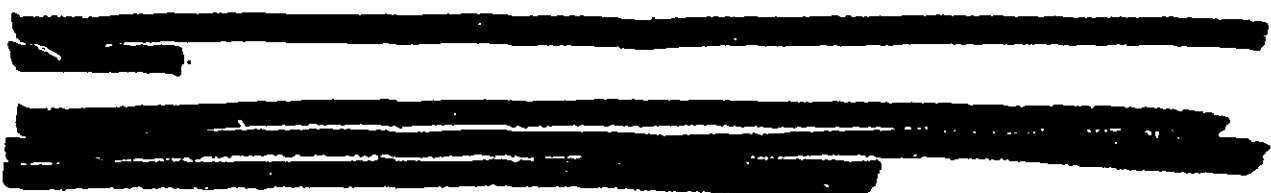
For heavy infestation, spray or swab. Let stand for an hour or more. Brush and wash away dead algae. Soak area again with S.N.-20 solution. Do not rinse. This product will inhibit the growth of algae on walkways. Allow to dry on surface and repeat application when

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algae growth returns. USE: 1 Tbsp. S.N.-20 concentrate to 1 gallon water.

ALGAE Control for "Bird Baths" DO NOT USE WITH FISH

Clean to remove algae growth prior to filling bird bath by spraying all exposed surfaces with S.N.-20 solution. Allow to air dry, brush ^{off} dead algae. USE: 1 oz. S.N.-20 concentrate to 2 gallons of water for cleaning.



MILDEWSTAT - Table Tops, Floors

To control mold and mildew on pre-cleaned hard, non-porous surfaces, (such as floors, walls, tabletops). Apply solution with a cloth, mop, or sponge making sure to wet all surfaces completely. Let air dry. Prepare a fresh solution for each use. Repeat application at weekly intervals or when mildew growth reappears. USE: 1 1/2 ounces of S.N.-20 concentrate to 1 gallon of water.

Seedlings - DAMPING OFF

To reduce damping off problems: Treat seeds and cuttings before planting with S.N.-20 solution. Use an inert material for planting seeds and cuttings, such as, sphagnum moss, vermiculite, perlite, pumice, sterilized commercial mix rather than garden soil. If garden soil must be used, drench with S.N.-20 solution.

After planting, water with S.N.-20 solution (unless you are using garden soil and have already drenched potting soil with S.N.-20 solution) and again after seedlings emerge. Spray, mist, or fog weekly as needed.

An S.N.-20 solution is effective in stopping the spread of damping off when sprayed on seedlings. USE: 1 oz. S.N.-20 concentrate to 3 gallons of water, or 2 tsp. S.N.-20 concentrate per gallon water.

Seedlings - DOWNY MILDEW

Most common on seedlings. The fungus sporulates on the lower surface of leaves as a white, sparse downy growth. The disease can cause the death of aerial plant parts. Spray with S.N.-20 solution at 5 day intervals until under control. USE: 1 ounce of S.N.-20 concentrate to 3 gallons of water

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Plant Cuttings

Begonia, Fuchsia, Geranium, Chrysanthemum, ^{for controlling powdery mildew, crown gall, leaf spots} Soak cuttings 2-5 minutes in S.N.-20 solution. USE: 1 tsp. S.N.-20 concentrate per gallon water.

Plant in compost drenched in S.N.-20 solution. USE: 2 tsp S.N.-20 concentrate per gallon water.

Narcissus, Gladioli, Iris, Easter Lilies, Tulips, Daffodil, Hyacinth - BULBS

Prestorage and Preplanting Treatments:

Treat the corms immediately after they are "cleaned" and treat again immediately before planting, by soaking them 10 minutes in a S.N.-20 solution to control fusarium basal rot. Air dry. USE: 1 Tbsp S.N.-20 concentrate to 1 gallon water

Iris - LEAF SPOTS

Circular spots, yellowish, then light brown with red border. Spray weekly while leaves are growing.

Iris - BOTRYTIS CROWN ROT OF IRIS; GRAY MOLD ROT, ON RHIZOMATOUS IRIS

Treat all new rhizomes before planting with S.N.-20 solution. Submerge rhizomes and 3 to 4 inches of leaves for 30 minutes, plant at once (while still wet with S.N.-20 solution) USE: 1 oz. of S.N.-20 concentrate to 3 gallons of water.

Roses - MILDEW (POWDERY MILDEW), RUST, BLACK SPOTS, ^sGALL ^{stem}

Spray with S.N.-20 solution when symptoms appear. Spray upper and lower surface of leaves and branches with S.N.-20 solution until thoroughly wet. Spray with S.N.-20 solution several times, 7 to 10 days apart. USE: 2 tsp. of S.N.-20 concentrate per gallon of water.

Roses - BROWN CANKER

Use regular spraying. Application should begin in the early Spring as soon as new growth starts and should be made often enough to provide protection throughout the rainy periods and to keep the new growth covered. On the average, an application once a week will be needed from early Spring until plants are dormant. USE: 2 Tsp. of S.N.-20 concentrate to 1 gallon of water.

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Calendulas, China Asters,
Lilac, Grape Myrtle, Live Oak,
Chrysanthemums, Snapdragons, Dahlias, etc. - POWDERY MILDEW

Spray with S.N.-20 solution when symptoms appear. Spray upper and lower surface of leaves and branches with S.N.-20 solution until thoroughly wet. Spray when buds burst in Spring and repeat in 2 weeks later. Spray with S.N.-20 solution every two weeks during mildew season. Also spray Live Oaks at bud break and again in April. USE: 1 ounce S.N.-20 concentrate to 3 gallons of water.

Cactus - ROOT ROT, BACTERIAL LEAF SPOT, TOP ROT

Rotting of underground parts by fungi and bacterial leaf spot or rot of the tops. Sterilize seeds and disease free cuttings by dipping in S.N.-20 solution for 5 minutes before planting. Spray at 10-14 day intervals. USE: 1 oz. of S.N.-20 concentrate to 3 gallons of water

Cactus - SLIMY COLLAR ROT

Just before planting, dip entire plant in S.N.-20 solution. USE: 2 tsp. S.N.-20 concentrate to 1 gallon water.

Saintpaulias (African Violets) - GRAY MOLD ROT (botrytis) BUD ROT, MILDEW, ROOT ROT and CROWN ROT,S

Dip plant and pot in S.N.-20 solution. Spraying is okay, but complete coverage of all surfaces is important. Spray every 10 days until controlled. USE: 1 Tbsp. of S.N.-20 concentrate per 4 gallons of water

Agucuba, Dahlia, ^{Pieris} ^{Fuchsia} ~~Perts~~, Geranium, ~~Fuchsia~~, Peony and Gladiolus - BOTRYTIS, GRAY MOLD, RUST, S
DOWNY MILDEW

Primarily affects new growth with symptoms of soft decay of flowers, leaves, or stems, followed by a covering of downy gray mold. Control of disease consists of quick removal of dead plant parts and application of S.N.-20 at the first signs of the disease. For Rust, apply at 7 to 14 day intervals during wet periods starting in early Summer. For Botrytis, spray buds and blooms lightly 2 to 3 times a week using a fine mist. Before shipping, dip spikes in S.N.-20 solution. USE: 2 Tsp. of S.N.-20 concentrate to 1 gallons of water

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Ferns, Begonias and Gesneria (Corytholoma, Isoloma, Alloplectus, Episcia, Trichospoum)
- LEAF SPOT, GRAY MOLD BUD ROT, and SHOOT ROT.

^{Sⁿ}
All phases of culture. Remove all plant refuse, or dead leaves, garden clean-up is important in control. Spray S.N.-20 solution before buds open. Then spray when blossoms show pink and again when 3/4 of blossom petals have fallen. Spray again two weeks after pedal fall. USE: 1 tsp. of S.N.-20 per gallon of water.

Fuchsia, Gardenia, Geranium Heliotrope - GRAY MOLD BUD ROT and STEM ROT

At the first sign of disease, pick off and burn infected leaves and blossoms spray, mist or fog weekly as needed. USE: 2 Tsp. of S.N.-20 concentrate to 1 gallons of water.

^S
Kalanchoe, Crassula and Sedum - ROOT and CROWN ROT, CROWN GALL.

Destroy infected plants, or plant parts and drench the remainder with S.N.-20 solution Spray plants weekly to assure solution getting around and in base of leaves. USE: 2 Tsp. of S.N.-20 concentrate to 1 gallons of water.

^a
Rubber Plant - ANTHRACNOSE on leaves and stems, CROWN GALL on stems.

At the first sign of disease, pick off and burn infected leaves, spray, mist or fog weekly with S.N.-20 solution as needed. USE: 1 Tsp. of S.N.-20 concentrate to 1 gallon of water.

Hawthorn, Hollyhock, Snapdragons - RUST S

Spraying for protection should begin with the development of new leaves following Winter cleanup, or dormancy. Spraying should begin before the onset of the raining season. Be sure the under sides of infected leaves are covered by S.N.-20 spray solution.

For Hollyhocks, apply at weekly intervals. Start as soon as growth begins. Repeat applications in late Summer.

For Snapdragons collect and burn the tops in the Fall. Indoors avoid sprinkling the foliage when watering. Apply S.N.-20 solution at 7-10 day intervals. Start when plants are set in the garden.

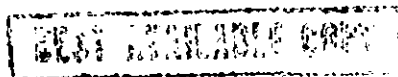
USE: 2 Tsp. of S.N.-20 concentrate per gallons of water.

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Flowering Dogwood (cornus florida) - LEAF SPOT, LEAF BLIGHT, ANTHRACNOSE

Small circular, dirty yellow spots with reddish purple margins on flowers, leaves and young shoots. Spray 4 times: When flower buds begin to open, as soon as flower bracts have fallen, 4 weeks later, and in late Summer after flower buds are well formed. If possible, spray just before rainy periods. USE: 1 oz. of S.N.-20 concentrate to 3 gallons of water.

Hawthorn (crataegus) - LEAF BLIGHTS

After a very wet Spring, small reddish brown spots appear on upper surface of leaves. When spots are numerous, leaves drop. Make 3 spray applications: First as soon as leaves emerge from buds; then when leaves are half grown; and again when fully grown. USE: 1 oz. of S.N.-20 concentrate to 3 gallons of water.

Snapdragons - PHYLLOSTICTA BLIGHT, ANTHRACNOSE, POWDERY MILDEW, DOWNY MILDEW, STEM ROT
RUST and WILT

Spray with S.N.-20 solution when symptoms appear. Spray upper and lower sides of leaves until thoroughly wet, every 7 to 10 days. Collect and burn the tops in Fall. USE: 2 tsp S.N.-20 concentrate per gallon water.

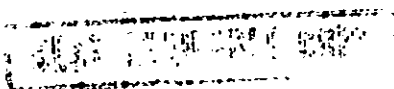
Carnations - LEAF SPOT, CARNATION RUST, GRAY MOLD ROT, STEM ROT, CANKER ROT, CROWN ROT
and ROOT ROT

For RUST, dip cuttings in S.N.-20 solution before planting. For GRAY MOLD, apply S.N.-20 solution one to two times just before bud bloom. Apply a light mist spray as the flowers are opening. Carefully collect and burn infected buds, blossoms and stems. USE: 2 Tsp. of S.N.-20 concentrate per gallons of water

House Plants

To control algae and cross contamination in Terrariums, bubbles, etc. Wipe inside of glass with paper towel dampened with S.N.-20 solution. Lightly mist ~~plants~~ with S.N.-20 solution. USE: 1/4 tsp. (scant) per quart of water.

plants



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Cut Flowers - BACTERIAL STEM PLUGGING

Containers - Tubes - and Decorative Vases

To eliminate stem plugging, which restricts uptake of water and ~~eliminate~~ bacteria and fungi which create ethylene gas, a causes of petal drop. Flower spikes should be hardened in S.N.-20 solution during harvesting, storage and shipping. Treatment with S.N.-20 solution will also help control transfer of diseases, such as Botrytis Petal Blight and Erwinia. USE: 1 tsp. to 1 gallon water.

controls

certain fungal diseases

Lawn - Grass - Dichonjra - for control of and RUSTS

1 pint of concentrate diluted treats 6,400 sq. ft.

the following fungal diseases in
Control ~~fungus~~ (Sclerotium rolfsii, Fade-Out, Dollar Spot, Rust, Leaf Spot, Fairy Ring, Toad Stools,) and Algae. Spray with S.N.-20 solution at rate of 5 gallons solution per 1,000 sq. ft. of turf. Be sure all surfaces of grass are treated, and area is thoroughly soaked with solution. Repeat USE: 1 Tbsp. S.N.-20 to 1 gallon water.

When it reappears

Trees (Sycamore, Ash, etc.) - ANTHRACNOSE

Spray upper and under side of leaves and twigs until thoroughly wet. A large tree requires 50-60 gallons of spray per treatment for adequate coverage. Treat tree with three applications: As buds start to swell in Spring; As leaves start to expand; and, As leaves are about 3/4 grown. USE: 1 oz. S.N.-20 to 3 gallons water.

Palms - HEART ROT and PENICILLIUM LEAF BASE ROT

At the first sign of rot
 completely fills cup, or "Heart", formed by palm branches at top center of plant. Repeat every 7 days until controlled. USE: 1 oz. S.N.-20 concentrate to 3 gallons water.

Overhead Watering Systems

During last 2-3 minutes of watering use S.N.-20 solution as a control program. Due to variations of growing conditions, use S.N.-20 solution every second to fourth watering. Will control algae in nozzles. USE: 1 oz. S.N.-20 concentrate to 20 gallons water.

Evaporative Coolers - ALGAE, FUNGUS, ODORS

Controls algae, slime forming fungi on cooler pads and certain fungal pathogens that may carry over in the cooler, as well as bacterial odors. USE: 1 tsp. S.N.-20 per 15 gal. water every other week.

dent