How Exhalt® 800 Extends Fungicide Protection

Microscopic particles of fungicide are suspended in water in spray tank.

One minute fungicide particle, greatly magnified. Countless millions of such particles in water become the spray solution.

Exhalt800 liquid enters spray tank. Hydraphobic (repelled by water), it breaks into a myriad of tiny droplets and attaches to fungicide.

Tiny Exhalt800 droplets form a porous, flexible fabric that encapsulates each fungicide particle (enlarged to show detail).

Turf, when sprayed, becomes coated with millions of fungicide particles, each particle encapsulated within the porous fabric of Exhalt800 droplets.

Encapsulated fungicide particles on blade of grass (magnified portion). The Exhalt fabric around each particle is porous and flexible; it lets plant breathe, flex and grow, releases fungicide slowly.

Percentage of fungicide retained after rain*

<table>
<thead>
<tr>
<th>INCHES OF RAIN</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
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</thead>
<tbody>
<tr>
<td>Fungicide alone</td>
<td>100%</td>
<td>75%</td>
<td>50%</td>
<td>25%</td>
</tr>
<tr>
<td>Fungicide &amp; brand X</td>
<td>100%</td>
<td>75%</td>
<td>50%</td>
<td>25%</td>
</tr>
<tr>
<td>Fungicide &amp; Exhalt800</td>
<td>100%</td>
<td>75%</td>
<td>50%</td>
<td>25%</td>
</tr>
</tbody>
</table>

*Results based on tests of spray coatings applied to glass panels and dried 10 minutes at approximately 70°F. Retention after erosion by rain was measured by solvent stripping the panels and determining the residual fungicide by quantitative ultraviolet spectroscopy.

p.s.

How to protect golf greens against fungus attack at one-half the usual cost:

Starting with one of Gordon's efficient, field-tested fungicides is the first of two important steps.

Because the requirements for disease management can vary as much as the problem itself, Gordon makes three different fungicides, each designed to do a specific job.

For example, DYMEC 50™ is our preventive green fungicide for outstanding control of Copper Spot, Dollar Spot, Brown Patch, Melting Out, Leaf Blight and Leaf Spot.

FORMEC 80™, another broad-spectrum preventive fungicide, is one of the few registered to control red thread.

For systemic control of fungus diseases, TOPMEC 70W™ gives both preventive and curative control of diseases like Dollar Spot and Fusarium Blight.

Whichever Gordon fungicide you choose, the point is that you can double or even triple its efficiency by adding Exhalt® 800 to the spray tank, and cut labor and material costs proportionately.

Your Gordon distributor is qualified to help you select the fungicide indicated for optimum use of your turf budget. Give him a call, today.

Your authorized GORDON distributor is listed on the following pages.

Circle 142 on free information card APRIL 1977/WEEDS TREES & TURF 21
TRIMEC Broadleaf Herbicide. Although it is the most efficient and effective product of its kind, Trimec actually costs less in use than any other. Its synergistic action controls the widest range of broadleaf weeds with one application. Root absorption is minimal, thus Trimec is trouble-free for flowers, ornamentals, trees and shrubs — both deciduous and coniferous. No vapor action after application. Effective in temperatures of 50° or lower. Sequestered to overcome water hardness problems. Treated areas may be seeded within two weeks. Non-flammable and non-corrosive in use. Biodegradable; friendly to the environment. Stable in storage for several years. A special Trimec Bentgrass formula is also available.

DYMEC 50™ Preventive Fungicide. Gives outstanding control of Copper Spot, Dollar Spot, Brown Patch, Stem Rust and the Helminthosporium strains. The 50% wettable powder is green for less visible residue. Use it with Exhalt®800 Sticker-Extender to prolong its effectiveness.

TOPMEC 70™ Systemic Fungicide for Ornamental Turf. Gordon's 70% wettable powder, with spreader-sticker, provides both preventive and curative control of fungus diseases like dollar spot and Fusarium blight. Broad-spectrum control. Ideal for bentgrasses, bermudagrasses, bluegrasses, fescues, St. Augustine, and their mixes. Add exhalt 800 to spray tank to prolong effectiveness of TOPMEC 70.

FORMEC 80™ Fungicide is a broad-spectrum disease preventive for turf, flowers and ornamentals. With the phasing out of cadmium and mercury compounds, FORMEC 80 is one of few products registered to control red thread. Use it with Gordon Exhalt®800 Sticker-Extender for extended protection.

BETAMEC-4™, the premier pre-emergence grass killer for use on established turf, ornamentals and ground covers. Controls crabgrass, Poa annua, grassy weeds and certain

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### AUTHORIZED DISTRIBUTORS GORDON PROFESSIONAL TURF PRODUCTS

<table>
<thead>
<tr>
<th>ALASKA</th>
<th>Palmer • Humano, Inc.</th>
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<tr>
<td>ALABAMA</td>
<td>Birmingham • Nalco Company, Inc. • Texas, Inc. • Montgomery • Texas, Inc.</td>
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<tr>
<td>ARIZONA</td>
<td>Phoenix • Occidental Chemical Co. • Target Chemical Co. • Capital Nursery Supply • Tucson • Copper State Chemical Company</td>
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<td>ARKANSAS</td>
<td>Alexander • Capital Equipment Co.</td>
</tr>
<tr>
<td>CALIFORNIA</td>
<td>Anaheim • Eagle Chemical Co. • Bakersfield • Alaska Turf Co. • Santa Ana • Arthur Chemical Co. • Santa Barbara • Agri-Turf Supplies, Inc. • Santa Maria • Purity Chemical Products Co. • South Gate City • Los Angeles Chemical Co.</td>
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<tr>
<td>COLORADO</td>
<td>Airdrie • L.A. Turf Products Colorado Springs</td>
</tr>
<tr>
<td>FLORIDA</td>
<td>Delray • Crown Chemicals, Inc. • Naples • Foster &amp; Company, Inc. • Lakeland • Liquid Turf, Inc. • Sarasota • Monterey Chemical Co. • Jacksonville • Asian Chemicals, Inc. • Kissimmee • Liquid Chemical, Inc. • West Palm Beach • A.I. Chemicals, Inc.</td>
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<td>GEORGIA</td>
<td>Atlanta • Atlanta Turf Chemical Co. • College Park</td>
</tr>
<tr>
<td>HAWAII</td>
<td>Maui • Occidental Chemical Co. • Mauna Loa • Growers, Inc. • Oahu • Occidental Chemical Co. • Kauai • Occidental Chemical Co.</td>
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<td>Boise • Boise Regis Co. • Caldwell • Wauchope Chemical Co. • Idaho Falls • Idaho Falls Turf Co. • Idaho Falls • Idaho Falls Turf Co.</td>
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<td>ILLINOIS</td>
<td>Bloomington • Professional Turf Specialties, Inc. • George A. Tovar, Inc. • Chicago • Turf Products Div. • General Chemical Co. • Formex Chemical Co. • Champaign • Formex Chemical Co. • Des Plaines • Formex Chemical Co. • River Forest • Formex Chemical Co.</td>
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<td>Cedar Rapids • Hawkeye Seed Co. • Council Bluffs • Liquid Aid Development • Des Moines • Des Moines Turf Supply • Davenport • Des Moines Turf Supply</td>
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<td>KANSAS</td>
<td>Dodge City • Western Garden'N Wise • Newton • Western Garden'N Wise • Salina • Western Garden'N Wise</td>
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<td>KENTUCKY</td>
<td>Lexington • Turf Management Supply</td>
</tr>
</tbody>
</table>
broadleaf weeds before they emerge. Not phytotoxic for established turf grasses. Apply in fall or early spring for spring and summer control.

**AMINE 2,4-D** Turf Herbicide, the old reliable dandelion killer. Although Trimec® has a far more efficient broadleaf herbicide, Gordon AMINE 2,4-D Herbicide is sometimes indicated for general weed control on ruts, roadsides, and ornamentals. Offers complete dispersion and uniform distribution. Flowable formulation won't settle hard in container.

**VEGEMEC™** Vegetation Killer. Destroys existing vegetation and prevents unwanted new growth. Ideal for parking lots, buildings, near fire hydrants, on old buildings, and grassy weeds. Apply in fall or early spring for best results. Promptly visible as plants and turf. Helps insecticides and fungicides cling to trees, shrubs and turf. Encapsulation protects them against erosion. A broad spectrum of certain insecticides provides excellent protection against pests. Reduces transplanting shock, protects plants from salt spray. Especially when you have stubborn problems. A full range of pre-emergent and post-emergent controls for broad leaf and grassy weeds. Preventative and curative disease controls. A full spectrum insecticide. A sticker-extender for greater pesticide efficiency. A soil-conditioner and wetting agent for special problems. All having the same great efficiency and economy you get with Trimec®. And all supported by the professionalism of your Trimec® distributor.

Call on him anytime ... especially when you have stubborn problems. Draw on his specialized training, skills and experience. Let him help you plan a total, effective turf-management program. Remember, your Trimec® distributor has a direct line to the Gordon Technical Service Department. Between us, we can solve any problem you may have.

Whatever your specialty or particular concern, he has the technical data and the products you need. A complete turf-care center under one roof.

Your Trimec® distributor. He's a silent partner you can count on, any day you need help.

As a turfman, you need a silent partner in the business. Someone you can count on for help. All kinds of help.

Your Trimec® distributor is just that. A veritable fountainhead of products and skills; virtually everything you need for better turf management.

You know he stocks Trimec®, the world's most efficient, most economical broadleaf herbicide. But you may be less familiar with his other fine turf products — a complete family of up-to-date problem solvers:

- A full range of pre-emergent and post-emergent controls for broad leaf and grassy weeds. Preventive and curative disease controls. A broad spectrum insecticide. A sticker-extender for greater pesticide efficiency. A soil-conditioner and wetting agent for special problems. All having the same great efficiency and economy you get with TRIMEC®. And all supported by the professionalism of your Trimec® distributor.
- A full range of pre-emergent and post-emergent controls for broad leaf and grassy weeds. Preventive and curative disease controls. A broad spectrum insecticide. A sticker-extender for greater pesticide efficiency. A soil-conditioner and wetting agent for special problems. All having the same great efficiency and economy you get with TRIMEC®. And all supported by the professionalism of your Trimec® distributor.
Tolerant strains of turfgrass should be of less concern next season. That’s the encouraging outlook on a number of golf courses in the northeast where a special test effort was underway in 1976 to measure new ideas in handling turf disease challenges in both normal and difficult weather. Treatments with combination products proved effective in halting tough disease.

The tests were established by Pat Nelsen, a Du Pont field development specialist, who concentrated on a program to handle tolerant strains of dollar spot (Sclerotinia). Pat Nelsen established a series of turf trials on fairways and greens of eight golf courses in Pennsylvania, New Jersey and Delaware. Her objective was to measure disease control under “normal” field conditions.

Tolerant strains of disease have aroused increased attention during the past several seasons, but the Nelsen trials indicate that timely protective treatments with the right products will deliver good control. Where tolerant strains exist, contact fungicides (i.e. Daconil, “Tersan” 75) used in combination with “Tersan” 1991 will control disease.

At first, when the weather was good, Pat Nelsen had trouble finding the tolerant strains of disease in...
the field. Later, under more difficult weather, she demonstrated that there were simple, practical ways to deal with tolerance even in areas where turf plots had been inoculated with these disease strains.

Pat Nelsen undertook the 1976 turf trials as a field assignment with Du Pont. A native of North Dakota and a biology graduate from Concordia College, she received her master’s degree in entomology and applied ecology from the University of Delaware in 1976.

In her Northeast turf disease control trials this past season, Nelsen treated plots on a regular 10-14 day schedule that matched disease control programs of many area golf courses. Half a dozen different spray treatments were included in a typical series of fairway and greens trials such as those she ran at Tavistock Country Club in Haddonfield, NJ.

Chemicals for each treatment were carefully pre-measured and packaged in plastic bags for mixing in the two-gallon hand-carried spray tank. A 4-nozzle, wheel-mounted boom delivered a precise 6-foot swath of chemicals, with pressure coming from a back-pack cylinder of carbon dioxide.

In past years dollar spot disease had been experienced regularly at the courses involved in the Nelsen tests. Disease pressure, of course, has always been variable, depending on the weather. But several weeks passed this season, before Tavistock Agronomist Rich Hurley was troubled by disease problems — even in untreated check areas.

When a tiny patch of Scelerotinia finally appeared on a green, Nelsen pulled a plug for a laboratory test. Promptly she had confirmed that the disease was tolerant to standard treatments of “Tersan” 1991 alone. Sprays of “Tersan” 1991 in combination with “Tersan” 75 or Daconil 2787 offered protection against the tolerant strains of dollar spot.

Altogether, Nelsen’s field studies confirmed the fact that precision full-rate applications of turf fungicides are basic to good disease control. To prevent pressure from tolerant strains of disease a superintendent should plan on combination treatments.

Fairway trial of fungicide combination is applied by development specialist Pat Nelson, using a 2-gal. tank, a 4-nozzle 54-inch boom mounted on a wheel.

Equipment adjustment was handled in the field by Pat Nelson, who used a 5-pound CO₂ tank to provide pressure for even application.
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**Ford rear blades** for grading, leveling, ditching, back-filling, snow clearing, other jobs. Eleven models, 6 to 10-foot widths. Swing offset feature, standard on selected models, lets operator offset the blade right or left quickly and easily.


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**Ford LCG (low center-of-gravity) tractors.** Ideal mowing and towing power. LCG design hugs the slopes, while optional dual rear or low-pressure, wide-base tires pamper turf. Shown with Ford flail mower. (Photographed at Pebble Beach, CA.)
Ford tractors and equipment are available in a wide variety of combinations to match your job needs. Ford tractor power includes Ford industrial tractors, Ford all-purpose tractors, Ford LCG (low center-of-gravity) tractors and Ford lawn and garden tractors. Most are available with options to match your special requirements. Here are a few of the many landscaping and grounds maintenance jobs that Ford tractors and equipment can do for you.

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Ford industrial tractor loaders. Backfill, load, lift, carry, spread or dump materials. Bucket capacities up to 1 1/2-cubic yards. Optional or standard Ford tractor features such as power steering... differential lock... foot accelerator... power-reversing transmission to ease operations.

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BEATING MOLE CRICKET

... One man's success story

One of the first problems encountered by Les Getchell when he took over as superintendent of the golf courses on Jekyll Island, Ga., was getting rid of a severe mole-cricket infestation.

Damage was extensive on the fairways of the three courses operated by the Jekyll Island Authority.

Getchell, a golfer and former Navy man who specialized in computer maintenance, felt qualified to take on the challenge. He was among the first to graduate from a special program at Lake City, Florida, Community College. It is the only school in the South that offers an Associate Science Degree in Golf Course Operations.

"The mole-cricket infestation was not only unsightly," Getchell says, "but it affected the business here. There was no question about repairing the damage on the greens immediately, because I think the majority of players feel that if you've got good greens any damage on the fairways can more or less be overlooked.

"But," Getchell adds, "I also felt some control measures had to be taken on the fairways to bring the insect population down to a tolerable level."

Getchell relates that his first step was to set up some experiments to determine what chemicals would do the best job. He worked closely with Dr. Bob Barry, who was then the head of the University of Georgia.

Continued on page 31

"The mole-cricket infestation was not only unsightly, but it affected the business here."
You can have a neat, clean aerating pattern on close to 2" centers

The hydraulic principle utilizes the weight of the vehicle for down-pressure giving you needed hole depth. Designed and ruggedly built to cut maintenance costs.

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