



WIPE OUT WEEDS

with Banvel® 4S & Banvel®+2, 4D

HERBICIDES

The broadleaf weed 'specialists' designed for professional turf programs.

Here's why BANVEL® herbicides are the professionals' choice for weed control:

- Used as directed Banvel will not harm trees, ornamentals or turf—it just eliminates weeds.
- No season restrictions. Lay down Banvel from early spring to late fall—all through the growing season.
- Rain will not affect Banvel. It keeps on working because it translocates—penetrates leaves and is absorbed through roots to attack every part of the weed.
- No special spraying equipment necessary. It is easy to clean out of equipment after use.
- Mixes readily with hard or soft water.
- Easily stored through winter months without losing potency.

Banvel herbicides—products
for professional turf men



Velsicol

VELSICOL CHEMICAL CORPORATION
341 East Ohio Street
Chicago, Illinois 60611

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Don't skimp on time or the relatively small amount of money it takes to keep your **electric irrigation motor in proper operating condition**. An adequate power supply, regular lubrication, providing a good "home" for the motor and pumping plant, and shutdown maintenance save you time and money, especially if your motor tires of abuse during a critical period in your irrigation schedule.

First, of course, the motor and pump must be carefully matched. Too-small or too-large motors are inefficient and energy-wasters. Then, your motor must have a good power supply—one in which there is little voltage deviation or imbalance. The reason is that minor voltage differences cause major increases in motor temperature.

This two-part formula describes the increase in temperature due to voltage variation: The percentage of voltage imbalance equals 100 times the maximum deviation from the average voltage divided by the average voltage. The related motor temperature rise equals 2 times the percentage of voltage imbalance squared. For example, if the average voltage reading is 215, and the voltage readings are 220, 215 and 210, the percentage of voltage imbalance is 2.3 percent. The increase in motor temperature, is 10.58 percent.

Generally, the motor's life is doubled for each 18 degrees F that operating temperature is reduced so skimping on wire size to your motor is obviously false economy. Unfavorable power source conditions will burn your motor out in minutes. The interruption of power on one line of a three-phase source means the other two lines will furnish about twice the normal current to part of the motor winding.

Less than normal current also increases the motor's current-draw. Thermal-type overload relays—which open automatically if overload persists—help protect motors. It is also essential that fuses or circuit breakers are provided according to engine specifications and that the motor has a well-grounded lightning arrestor.

Shading from direct sunlight, regular lubrication, and keeping the motor clean from dust and dirt, chaff and grease also help keep the motor cool.

Proper lubrication includes oil type used, schedule of changes, and gauging stress from the motor's environment. Some motors need oil for continuous lubrication of thrust bearings, and ordinary motor oils won't do. The detergent in motor oils keeps wear particles and contaminants in suspension, which promotes bearing wear. In addition, most motor oils are not made for the heavy service expected in irrigation motors.

Excessive heat oxidizes the oil, which forms gums, varnish, and organic acids. All of these by-products reduce the oil's lubricating capacity and encourage wear. For each 15 degree F increase in oil temperature, oxidation doubles and oil life is cut in half.

On motors where the bearings need greasing, regrease at least once a year or oftener. On some motors, an exit plug has to be removed to permit flushing of old grease. If the bearings become "over-packed", the balls slide instead of roll, and excess heat builds up. Water-cooled bearings always need adequate water flow.

Your motor's efficiency and useful life are also heavily dependent on its foundation. Misalignment of the drive shaft is a leading cause of motor-pump drive failure. Proper motor-pump alignment means a stable foundation, preferably concrete, to reduce vibration. Because foundations often shift after a period of time, the foundation, motor, and drive should be inspected for alignment at least once a year.

Shutting down your motor properly is also a maintenance function. Drain old oil while the motor is warm and replace it with the proper grade of new oil. To avoid seizure of bearings and gears, operate the motor at least five minutes once a month. At least once each year, check the wear pattern of gear teeth and gear backlash in the pump drive for signs of abnormal wear.

Following these simple maintenance steps will help you get more useful life from your motor--and for less money. When you irrigate is another money-factor to consider. To help reduce costs, check with your power company about operating during off-peak hours when demand is low. These periods are usually at night, when temperatures are lower and motor operation is more efficient anyway. And, because lower demand by other users help avoid fluctuations, operating during off-peak hours may save additional money from improved motor operation.

A new paving for turfgrass areas is being introduced by Turfgrass Products Corp. of North Miami, Florida. Tom Mascaro, president and internationally known turfgrass expert and inventor has developed GRASS-CEL• Paving to help eliminate soil compaction and turfgrass wear on intensive use areas. Grass-Cel Paving has a honeycomb structure that resembles small six sided flower pots joined together. The walls of the cells support the weight and wear of traffic while protecting the soil and grass plants. As easy to install as floor tile, ordinary work crews can plant them. Made of tough resilient green synthetic materials, Grass-Cel is practically invisible after established.

Principle uses on golf courses will be golf car paths and sides, tee areas, around shelters and for foot paths. Grass-Cel Paving can also be utilized in many hard use areas other than golf courses. Additional parking lots can be developed around the club house while still keeping the natural beauty of grass. Pro shop areas, golf car parking and practice areas can use the load bearing features of this paving.

Grass-Cel Paving Blocks open new and exciting concepts in landscape design. This unique and practical product will be available from the company and through dealers.

1065 N.E. 125th Street, Suite 101
North Miami, Florida 33161
Phone 305/895-1536

FIRST AID FOR HERBICIDE OVER-APPLICATIONS

1. Apply activated charcoal (200 lbs. per acre) to the surface.
2. Irrigate heavily (two inches) to leach out free herbicide.
3. Hole-punch if possible.
4. Topdress heavily (one quarter inch).
5. Stop mowing and fertilizing.
6. Apply fungicide at regular intervals.
7. Mow new growth only when necessary. Begin fertilizing lightly at this time. If step 3 was not done, aerify now and follow with a light topdressing.
8. Keep traffic off until recovery is assured.

Do these steps in order and as rapidly as possible.

NATIONAL CHEMSEARCH CORP.

222 South Central Ave.
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