

# RISK/BENEFIT INFORMATION FOR PESTICIDE APPLICATIONS

COMPANY NAME: FOEGLEY LANDSCAPE INC.

PESTICIDE: COPPER SULFATE

**NOTICE:** *Please ask your applicator about special preparations you may need to make (yard, house, pool, etc.) prior to application, and other precautionary measures specific the pesticide products applied.*

## Definition of a Pesticide

A pesticide is any substance or mixture of substances intended to control pests. The word “pesticide” is an umbrella term for many different types of products that control a wide range of pests. Pests commonly found include weeds, insects, diseases, mites, and rodents. Pesticides designed to control these pests are called herbicides, insecticides, fungicides, miticides, and rodenticides. Another group of pesticides called plant growth regulators is used to manage the growth of plants in the landscape.

**State and federal laws require that pesticides must be applied according to label directions. Labels direct users as to how, where, and at what rate the material must be applied. Upon request, your applicator will supply you with a copy of the label(s) for the product(s) applied.**

## How Pesticides Work

Products intended for use on your property are applied as a liquid, dust, aerosol, granule, or bait and are generally active for a few minutes to a few months. Some compounds control pests on contact by damaging the physical structure of the pest. Other compounds become active only after they are absorbed or ingested, by interfering with physical development or the reproduction ability of the pest. The pesticide product label contains specific information on how to control targeted pests. **All pesticides must be applied in accordance with label directions.**

Pesticides may be effective against a large class of organisms or they may be specific to a particular organism. This means that many times, applicators can choose an effective pesticide or pest control strategy that will minimize potential impacts to humans, pets and other non-target organisms.

## Why Pesticides are Used

Pesticides are a tool people use to protect crops, homes, animals, structures, or their landscape plants from pest damage. Examples are the protection of buildings from termites, lawns from weed and insect damage, and indoor environments from invasions by insects and rodents. They are also used to control mosquito populations, control disease vectors for public health concerns, protect food crops, and for weed control in lakes and ponds.

## Type of Compound Used

ACTIVE INGREDIENT	BY WEIGHT
COPPER SULFATE PENTAHYDRATE.....	99.0%
OTHER INGREDIENTS.....	<u>1.0%</u>
TOTAL .....	100.0%

## General Toxicity Information

Toxicity is a general term used to indicate the adverse effects produced by a pesticide. Understanding the potential health risks from pesticides requires knowledge of the exposure and the toxicity of the compound.

**Exposure:** Pesticides can enter the body by *ingestion, inhalation, or absorption through the skin*. Exposure occurs most frequently by absorption to the skin. One of the most effective ways to reduce risk is to reduce any potential exposure by restricting access to the treatment area.

There are two broad classifications of pesticides – *general use* and *restricted use*. These are United States Environmental Protection Agency (EPA) designations used to determine who may purchase and use the many kinds of pesticides available. General use pesticides are usually considered to have a lower toxicity or risk than restricted use pesticides, and have fewer restrictions regarding who may purchase or use the products. For example, all of the pesticide products that homeowners may purchase are general use pesticides. The majority of the products that are routinely used on your property and yard are also general use pesticides.

Restricted use pesticides can only be purchased and used by applicators that are certified by the State of Michigan, many of who receive additional professional training. Only in specific instances would these kinds of products be used on your property. Please refer to the section of your customer paperwork or invoice that shows which products were used at the time of application. (If you have any questions as to the type or toxicity of the products used on your property, please contact the manufacturer indicated on the pesticide label, or contact the applicator).

### **The Amount or Rate of Pesticide Applied**

**FOR ALGAE CONTROL** – Begin continuous addition application of granular Copper Sulfate when water is first turned into the system and continue throughout the irrigation system, applying 0.1 to 0.2 lbs per cubic ft per second per day.

**FOR LEAFY AND SAGO POND WEED CONTROL** – Use the same continuous feeder, applying 1.6 to 2.4 pounds Copper Sulfate Pentahydrate per cubic foot per second per day. NOTE: For best control of leafy and sago pond weed, it is essential to begin Copper Sulfate additions when water is first turned into the system or ditch to be treated and to continue throughout the irrigation system. Copper Sulfate becomes less effective as the alkalinity increases. Its effectiveness is significantly reduced when the bicarbonate alkalinity exceeds 150 ppm. Should Copper Sulfate fail to control pond weeds satisfactorily, it may be necessary to treat the ditch with either a suitable approved herbicide or use a mechanical means to remove excess growth. In either case, resume Copper Sulfate addition as soon as possible.

### **TO CONTROL ALGAE IN IMPOUNDED WATERS, LAKES, PONDS AND RESERVOIRS:**

There are several methods by which to apply Copper Sulfate to impounded water. Probably the most satisfactory and simplest method is to dissolve the Copper Sulfate crystals in water and to spray this water over the body of water from a boat. A small pump mounted in the boat can easily be used for this purpose. Fine crystals may be broadcast directly on the water surface from a properly equipped boat. A specially equipped air blower can be used to discharge fine crystals at a specific rate over the surface of the water. When using this method, the direction of the wind is an important factor. Do not use this method unless completely familiar with this type of application. Where the situation permits, Copper Sulfate may be applied under the water by dragging burlap bags containing Copper Sulfate. The crystals are placed in burlap bags and dragged through the water by means of a boat. Begin treatment along the shoreline and proceed outward until one-third to one-half of the total area has been treated. Care should be taken that the course of the boat is such as to cause even distribution of the chemical. In large lakes, it is customary for the boat to travel in parallel lines about 20 to 100 feet apart. Continue dragging the burlap bags over the treated area until the minimum dosage is achieved and all crystals have been dissolved. Large or medium size crystals that dissolve slowly should be used with this method. Copper Sulfate can be applied to impounded waters by injecting a copper sulfate solution in water via a piping system

## Environment which Pesticide is Applied

Is applied to lake, ponds, reservoirs for weed and algae control

## Common Sense Precautionary Measures and Site Preparation

It is important to discuss site preparation and precautionary measures with your applicator.

Additionally,

- **DO NOT** enter the treatment area until the time period provided by/posted by the applicator has elapsed.
- The product applied may have a specific re-entry or pre-harvest interval during which you may **NOT** enter the area or harvest the crop.
- For indoor applications – put away all food items, children’s toys, and clothing. Cover fish tanks, remove pets, and perform any additional tasks as outlined for the specific application by your applicator.
- For outdoor applications – put away children’s toys and any clothing that may be outside drying, remove pets, discard water for pets and water in birdbaths, close windows, move or place your vehicles in the garage, and make certain that applicators understand what areas, such as children’s play areas and home gardens, should **NOT** be treated.
- Additional precautionary measures may need to be taken to limit exposure for sensitive individuals such as: infants, small children, pregnant women, and senior citizens; persons on prescription medications; and persons with medical conditions such as respiratory conditions or immune system concerns.

## Environmental Fate of Pesticides

Exposure to light, heat and other agents in the environment cause pesticides to deteriorate. The amount of time that it takes to break down the pesticide depends on the temperature, humidity, light, moisture conditions, and other environmental factors. As a result, degradation times are highly variable depending on the compound and the environment in which it was applied. Generally, your applicator will select those pesticides that are the most effective and the least persistent. Any areas on your property that may be of specific concern should be to the attention of the applicator.

If you encounter an unusual reaction following a pesticide application, immediately wash with soap and water and consult with a physician. It is important to provide the doctor with any information you may have concerning the pesticides used. Refer to the section of your customer paperwork or invoice that shows which products were used at the time of application. Additional emergency information about the pesticide may be obtained by contacting the **National Poison Control Center at 1-800-222-1222**, or the **National Pesticide Information Center at 1-800-858-7378** or [www.npic.orst.edu](http://www.npic.orst.edu).