

Deactivating Herbicide Residues



It may be necessary, after an improper application of a soil residual herbicide, to deactivate that herbicide residue with activated charcoal. The use of activated charcoal (granular or powder) can reduce the herbicide residue by absorbing the herbicide into the charcoal's surface.

Charcoal can reduce the available level of most, but not all, herbicides. This results in a more suitable growing environment in a shorter period of time. However, it is not possible to eliminate all chemical residue and the associated inherent risk.

Testing for herbicide residue

Herbicide analysis is expensive. If the undesired herbicide cannot be determined from a spray record, or the injury symptoms found in the plant, certain labs can be utilized to determine the herbicide in question. **As a general rule of thumb, an analysis showing a 1 part per million (ppm) soil residual in the top 3 inches of soil equals 1 pound active ingredient per acre.**

A second method of testing would be to conduct a bioassay using plants sensitive to the herbicide.

Growing sensitive plants in soil from the treated area can prove or disprove the presence of active residues. This bioassay process takes about four weeks to complete.

Rate of charcoal application for DuPont™ Hyvar®, Karmex®, Krovar® I DF and Velpar® herbicides

- Use 100 to 200 pounds of charcoal per pound of active ingredient. Use no less than 600 pounds charcoal per acre, or 2 pounds per 100 square feet.

For DuPont™ Escort® XP, Landmark® XP, Oust® Extra, Oust® XP and Telar® XP herbicides

- Use 600 pounds of charcoal per acre for each ounce of herbicide. Use no less than 600 pounds per acre, or 2 pounds per 100 square feet.

Charcoal application

Apply the charcoal, then mix it into the top 6 inches of the soil using a rototiller or similar incorporation implement. Use of granular charcoal provides greater ease of use.

In cases where a high residue is expected, remove the top 6 inches of soil, then mix charcoal into the next 6 inches of soil. Backfill the area with uncontaminated soil. Properly dispose of the contaminated soil that was removed.

A trenching method may be utilized to stop the lateral advancement of the unwanted herbicide by digging a 4- to 6-inch wide by 2-foot deep trench. Remove the contaminated soil and refill with new soil mixed with charcoal. This method is useful when attempting to protect trees.

After the charcoal application, fertilize lightly and water the plants to promote vigorous growth.

For more information

Contact your local Vegetation Management Service Center or DuPont representative. And visit us on the Web at vm.dupont.com.

This reference guide is not intended as a substitute for the product label for the product(s) referenced herein. Product labels for the above product(s) contain important precautions, directions for use and product warranty and liability limitations that must be read before using the product. Applicators must be in possession of the product label(s) at the time of application. Always read and follow all label directions and precautions for use when using any pesticide alone or in tank mix combinations.

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