



When preparing for a herbicide application, it's important to take the proper steps to make sure herbicides are handled carefully and used correctly. By focusing on factors such as understanding herbicide labels, Personal Protective Equipment (PPE), properly functioning equipment, proper mixing techniques and post-application cleanup, you can minimize exposure to herbicides, incorporate safe practices and procedures, and ensure your application is a success.

How to Read a Herbicide Label

Herbicide labels are required by the U.S. Environmental Protection Agency (EPA) and are the main source of information about how to use the product safely and legally.

Important information on a herbicide label includes:

- Name of the product
- Directions for use
- Chemical and common name of the active ingredient
- Ingredient statement, including percent of content and type of formulation
- Name and address of manufacturer
- EPA registration and establishment numbers
- Restricted or non-restricted use product
- Signal words and symbols, such as "Caution" or "Warning"
- Pesticide precautionary statement
- Worker Protection Standard requirements and precautions

Personal Protective Equipment (PPE)

Those applying herbicides should know the importance of safety procedures and equipment when handling herbicides. Applicators need to minimize herbicide exposure by following label directions and wearing PPE.

The following are some general tips to use as guidance when mixing, handling or applying herbicides:

- Put on clean clothes every morning. When washing clothes, be sure to wash PPE separately from other laundry.
- Wear long-sleeve shirts and pants.
- Wear chemical-resistant gloves when the label requires it or when there is prolonged or frequent contact. Use gloves made of waterproof material.
- Wear rubber or vinyl boots with socks.
- Use protective eyewear when the label directs. Wear a hat or helmet to protect hair and scalp.

Properly Functioning Equipment

Before mixing and applying herbicides, make sure your equipment is functioning properly. Sprayer equipment should be stored indoors when possible and thoroughly checked after prolonged storage.

The following are some general tips to use as guidance when checking sprayer equipment:

- Always do a first quick rinse of equipment prior to spraying. Sprayers should have been cleaned and rinsed after last use.
- Before adding water, visually check all hoses, o-rings, or fitting gaskets for cracks or excessive wear.
- Clean any filters or in-line strainers.
- Check nozzles and strainers for obstructions. Clean nozzles with a soft bristle brush.
- Pressure check the system for leaks using water. Check for leaks in hoses, fittings and valve areas.
- Check proper functioning of nozzles and spray wands, looking for proper pattern and excessive drips. For adjustable cone nozzles, check for proper pattern at the wide and narrow cone settings.
- Periodically check nozzles for proper volume of delivery. If any nozzle shows a 10% variance from nozzle manufacturer specifications, replace that nozzle.
- For all sprayers, always check calibration with water prior to spraying herbicides.



Best Management
+ PRACTICES



Herbicide Measuring and Mixing

Properly measuring and mixing herbicides helps improve results, saves money and enhances safety. Not accurately measuring and mixing a herbicide solution may result in the need to reapply herbicides, which increases labor, time and cost of materials.

The product label is a good place to double-check herbicide rate recommendations. The rate will depend on factors such as the plant species you want to control, the environment and the type of application you've selected.

Here are some important points to remember for safely and effectively measuring and mixing herbicides:

- Don't get distracted. While measuring herbicides, finish the task at hand before answering the phone or talking to others.
- Purchase measuring containers with easy-to-read graduations. Replace worn containers that can become difficult to read and check the accuracy when you purchase a new container.
- Always read measurements in a well-lit location, with containers placed on flat, level surfaces.
- Be aware of all mixing requirements and procedures indicated on the product labels.
- Choose your mixing site carefully. For instance, avoid mixing a soil-active herbicide under a tree in case of a spill, which could damage the tree. Also, if mixing a more volatile herbicide, beware of continual fumes, which could cause foliar damage to nearby desirable vegetation.
- Keep containers below eye level when opening and pouring.
- Keep fill hoses above water level in the spray tank to prevent back siphoning.
- Be aware of wind direction before pouring to minimize exposure downwind.
- Thoroughly clean application equipment after each use.

Cleaning Up After an Application

The following are some important points to remember when cleaning up after applying herbicides:

- Use a nozzle brush or other device to clear clogged nozzles.
- Follow storage and disposal instructions found on the label based on the herbicide container size used.
- Be sure to thoroughly clean spray equipment on the use site before using it to apply any other herbicides.

General Items to Remember

- Always read and follow the herbicide label directions.
- Do not spray if you are working immediately upwind of desirable trees, shrubs or other susceptible crops.
- Do not spray within 100 feet of known sinkholes or fractures that would allow the herbicide to enter underground aquifers.
- Your cost of treatment using herbicides increases rapidly as the density and size of the plant you wish to treat increases.



Visit us at rangeandpasture.com



©TM, SM Trademarks or Service Marks of Dow AgroSciences, DuPont or Pioneer and their affiliated companies or respective owners.

© 2019 Corteva Agriscience
CR01 000 020 (01/19) 010-58732