

Spray droplet size requirements on pesticide labels



The spray droplet size for liquid pesticide applications is often included among the various directions on a pesticide label. Compliance with this requirement, like all other directions on the label, is **mandatory** under the *Pest Control Product Act*.

Why require a specific droplet size?

Droplet size refers to how big each droplet of a sprayed liquid is. The criteria for spray quality, including droplet size, is specified on the label of many pest control products to maximize efficiency while minimizing the possibility of spray drift to non-target areas. The optimal droplet size that has been established and appears on a label depends on a number of factors, including:

- Type of vegetation or surface being applied to control the target pest
- Application equipment
- Weather conditions at the time of application, if sprayed outdoors

What to look for

When you are looking at a pesticide label, you may see terms such as fine spray, mist, or coarse. Health Canada approved labels use the droplet size classification and range standards established by the *American Society of Agricultural and Biological Engineers* (ASABE S572.1 to S572.3 Droplet Size Classification).

Your responsibilities as a pesticide user

- Ensure that your application equipment can produce the droplet size specified on the label.
- Read the label carefully and follow all directions of use, including those related to permitted equipment and the required droplet size.
- Follow all the precautionary measures found on the label to protect people, the environment, and pollinators.
- Use the application equipment according to the manufacturer's user manual.
- Wear the required personal protective equipment (PPE) in accordance with the instructions on the label.

The user manual for spray equipment should contain information on the range of droplet sizes it can produce, by category, size, or volume median diameter (VMD), and how to adjust your sprayer to obtain the desired droplet size. If the user manual is unclear, contact the retailer who sold you the equipment or the equipment manufacturer.

Users must follow the instructions on the most up-to-date labels.
Using a pesticide contrary to the label directions is a violation
of the *Pest Control Products Act*.

Examples of label statements

- Do not apply with sprays finer than the American Society of Agricultural and Biological Engineers (ASABE) S572 (572.1 to 572.3) [*Fine/Medium/Coarse*] classification.
- Do not apply with cone-type nozzle or other nozzles that produce a fine droplet spray.
- Do not apply using mechanically-pressurized handheld equipment for mists, aerosols, and fogs (droplet sizes 0.1-100 µm).
- Use a coarse droplet size and low pressure spray not exceeding 345 kPa (50 psi) to avoid splashing onto non-target surfaces.

Droplet size categories¹

Droplet size	VMD ² (µm)
Extremely fine	<60
Very Fine	61-105
Fine	106-235
Medium	236-340
Coarse	341-403
Very Coarse	404-502

Note 1 Excerpt from [Structural pest control products: label updates: PMRA guidance document](#)

Note 2 The volume median diameter (VMD), measured in micrometres (µm), is the value where 50% of the total volume or mass of liquid spray is made up of droplets larger than and 50% smaller than this value.

Role of Health Canada's Pesticide Compliance Program (PCP)

The PCP is responsible for promoting, monitoring, and enforcing the *Pest Control Products Act* (PCPA). During an inspection, Health Canada inspectors may ask you to demonstrate that the equipment used and the pesticide application practices allow you to comply with all label instructions, including the droplet size. When a violation is identified as a result of an inspection, enforcement action is taken in accordance with Health Canada's [Compliance and enforcement policy for pesticides](#).

Read and follow the label

All pesticides registered in Canada have a Health Canada-approved label with a registration number. Read the pesticide label carefully, as it contains specific information on how to use it.

To find the most up-to-date label, use the Health Canada online [label search tool](#), or search for "Health Canada pesticide labels" using your favourite search engine.

For more information

Health Canada's Pesticide Compliance Program (PCP) is responsible for enforcing the *Pest Control Products Act*. Visit canada.ca/pesticide-compliance