

# SAFETY TIPS

## Landscape Safety – Backpack Sprayers

Backpack sprayers are very helpful and useful equipment that allow workers to cover large areas with less effort while giving the worker more freedom to move and use their hands. Backpack sprayers can vary in size and capacity and generally hold between 3 to 6 gallons of liquid and can weigh from 35 pounds to over 50 pounds. While the backpack sprayer can improve work efficiency, workers are frequently injured while using them and almost all injuries can be prevented if they are used properly and safely.

The most common causes and types of injuries from using backpack sprayers include:

- Chemical burns to skin due to accidental release and spills of hazardous chemicals.
- Acute and chronic eye injuries from exposure to chemicals.
- Strains and sprains.
- Slips, trips, and falls while carrying the sprayers.

### **Before You Start Your Work:**

- Only use tools and equipment you have been thoroughly trained to use. All training should be documented. If you have any questions or are unsure of how to use a tool, attachment, or any piece of equipment, do not use it and immediately notify a supervisor.
- Thoroughly review and understand the safety and operating information for the specific backpack sprayer you are using.
- Do not use or handle any hazardous or potentially hazardous material/chemical until you have reviewed and understand the product Safety Data Sheet (SDS). Ensure that the Safety Data Sheet is strictly followed.
- Before using the sprayer, always thoroughly inspect the sprayer and its components. Inspect the tank, hose, sprayer, and all connections for unusual wear, cracks, damage, and any signs of leaks. If the initial inspection does not identify any leaks, pump the sprayer slightly to create interior pressure and, again, look and listen for leaks. If any leaks are observed or if the sprayer fails the pre-use inspection, do not use the sprayer. Tag and remove the sprayer from service and notify a supervisor.
- Before you start your spraying, check the weather, especially the direction and strength of the wind. Plan your work so that the material being sprayed blows away from you and other workers in the area. If the wind is too strong and/or does not allow for safe spraying, postpone the spraying until it is safe.
- Using a “drift guard” or spray cone, can allow for more direct and accurate spraying while minimizing overspray.

### **Safe Sprayer Operations:**

- Always follow the Safety Data Sheet for the product(s) being used. Wear the required Personal Protection Equipment (PPE), including eye protection, chemical resistant gloves, coveralls or other protective attire, and respirator.
- Follow the instructions precisely on the chemical labels when mixing, handling, and storing the product.
- To reduce the potential for strains, when possible, place the prepared backpack sprayer on a table, truck bed or tailgate, or other raised surface that allows you to put your arms through the straps with minimal bending or lifting. You can also ask a coworker to hold the backpack sprayer up while you put it on.

Always use proper lifting technique by bending at the knees and not at the waist.

- Never use flammable liquids, acids, or caustic chemicals in the sprayer and only use products you have been authorized to use in the sprayer.
- Inspect the work areas before starting and always pay attention to where you are walking and where you are spraying. Do not rush or run while spraying.
- Due to the weight of the backpack, be careful when walking and bending down or leaning. When bending, make sure to bend at the knees and not at the waist. Do not carry heavy or awkward items while wearing the backpack. Do not climb ladders or stairs while wearing the backpack, and do not jump from an elevated surface such as a truck bed, especially while wearing a backpack.
- Only relieve the tank pressure as directed by the sprayer operator's manual. When the sprayer is not being used for extended period, is being transported, or at the end of the day, the pressure should be relieved.
- If you believe some of the product from the sprayer may have leaked onto your body or clothing, stop work immediately and follow the product Safety Data Sheet regarding first aid or clean up. Do not wear contaminated clothing.
- Always direct the spray wand away from other people or animals.
- Spray tank, hoses, nozzle, and other parts should be rinsed and cleaned thoroughly after use. Any remaining product in the spray tank should be disposed of properly, safely, and according to the product's SDS.
- Secure and store the sprayer in an enclosed location, out of direct sunlight to prevent damage from the ultraviolet light.

### **Personal Protection Equipment (PPE):**

- Review the SDS for all products being used and follow the SDS regarding required PPE.
- Always wear your eye and face protection when required. Keep in mind that eye protection will only protect the eyes, and a full-face shield, in addition to eye protection, would provide more thorough protection.
- Eyewear can fog up when working outdoors in the heat and humidity, so look for protective eyewear with anti-fog coatings or use an anti-fog application on the lenses.
- Store and maintain all your PPE properly. Store your eye protection in a safe location, away from heat sources and chemicals, and where they will not be damaged by tools or equipment.
- Respirators should be properly cleaned before and after each use and stored in an air-tight container, out of direct sunlight, when not being used.

Always make safe choices. Report all injuries, even minor ones, to your supervisor to ensure you receive proper care and to prevent minor injuries from becoming more serious.