



Safety Bulletin Number: **0000009**

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Electrostatic Cleaning Equipment Hazards

Legal information

Issued pursuant to the Occupational Health and Safety Act and Regulations

Some of the occupational health and safety legislative requirements that pertain to the use of electrostatic sprayers include:

- [Occupational Health and Safety Act](#) - employer's obligations for training and safety precautions under section 13
- [Occupational Health and Safety General Regulations](#) - personal protective equipment covered in section 9 and fire safety covered in section 25
- [Workplace Health and Safety Regulations](#) - equipment safety in section 1.10, 1.12 and 1.14
- Workplace Hazardous Materials Information System ([WHMIS](#)) Regulations - chemical safety training and knowledge in sections 4, 12 and 14

Summary

The use of electrostatic sprayers to disinfect surfaces presents many potential hazards. Anyone who uses electrostatic sprayers to disinfect surfaces needs to know about the hazards associated with this equipment and how to control those hazards.

One of these hazards is electrostatic discharge (ESD). An electrostatic discharge is discharged static electricity, which all Canadians have experienced in the winter season or when rubbing a balloon on your hair.

Electrostatic discharges create a potential ignition hazard in areas with flammable liquids, gases, or dust that could lead to a fire or explosion. This equipment should never be used in an area with flammable or combustible substances. The risk for this ignition hazard is higher in the winter when the dry air allows static charges to build-up.

The electrostatic discharge hazard also presents a possible health hazard to people who have sensitive medical implants such as pacemakers, as it may affect their function. Note also that it is unsafe to use this equipment near a defibrillator. For industries with other sensitive electronic equipment, electrostatic discharge is destructive to semiconductor electronic devices.

For portable units, the battery and charging station may have special handling precautions to prevent fires from starting in the battery or the charge station. Some battery units have been [recalled](#) due to battery malfunctions that resulted in fires.

Electrical hazards include electrocution from damaged batteries or the battery terminal. Never splash or immerse electrical equipment in water.

Lastly, the chemicals used in the electrostatic sprayers may contain harmful components. Specific training on the Safety Data Sheet is required and protective measures may be necessary.

Ensure all hazards and safety precautions are communicated when training employees on the safe use of equipment. Always follow all safety precautions provided by the equipment and chemical manufacturer when using this equipment.

Contact for bulletin queries

Safety Branch
Labour, Skills and Immigration
1-800-9LABOUR / 1-800-952-2687

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