

2022



FACTSHEET  
**PESTICIDES**

## PESTICIDES

Pesticide is a term used to refer to many types of pest control products including herbicides, insecticides, fungicides, rodenticides, electronic insect or rodent devices, and wood and material preservatives. Pesticides are made from synthetic or naturally occurring ingredients and are used to control pests that can cause damage to buildings, spread disease, and kill crops and trees. However, the improper use of pesticides can be hazardous to human health and the environment.

The health risk posed by pesticides depends on the type of pesticide, the amount and concentration, the length of exposure, and the route of entry. Pesticides can have both short-term and long-term health effects and most often affect the nervous system. Due to the negative health impacts, pesticide use is regulated by Health Canada under the **Pest Control Products Act**. Only registered products that have been tested, approved, and assigned a Pest Control Products (PCP) number by Health Canada are to be used and they must be used in accordance with the label directions and the established **Maximum Residue Limit (MRL)**. The MRL is the maximum amount of residue that is expected to remain on food products when a pesticide is applied following the label directions and will not have a negative health impact on humans. MRLs are set for each registered pesticide for different food commodities and are set at levels well below the amount of pesticide residue that could cause health concerns.



## PESTICIDE LIMITS

The following limits have been established for pesticides by the NSLC. Please note that these are subject to change.

Chemical Name	Maximum Concentration Allowed µg/L				
	Beer	Cider	Ready to Drink	Spirits	Wine
Carbaryl	800	300	100	Not Tested	800
Cypermethrin	500	500	100	Not Tested	500
Iprodione	2000	2000	100	Not Tested	2000
Malathion	1000	1000	100	Not Tested	1000
Myclobutanil	1000	1000	100	Not Tested	1000
Procymidone	1000	500	100	Not Tested	1000
Pesticides not listed above.	100	100	100	Not Tested	100

\*Organic products must have no detectable levels of any agricultural chemicals.

## SOURCE OF PESTICIDES

### Raw Materials

- If pesticides are not used properly and good agricultural practices are not followed, excess amounts of pesticide may be present on raw materials such as grains, hops, fruits, vegetables, or botanicals.
- Water, such as surface or groundwater, used during the growing of crops may be contaminated with pesticides via spray drift, runoff or leaching through the soil.

## CONTROLLING PESTICIDE CONTAMINATION

- Consider the raw material supplier. Ensure raw materials are purchased from approved, trusted suppliers. Consult with the supplier on good agricultural practices regarding pesticide use and water quality. Consider which pesticides are used and if the soil and water sources have been assessed for potential hazards. Visit Perennia's [website](#) for more information on commodity-specific production.
- Ensure water used as an ingredient and for processing and cleaning meets [Health Canada's Guidelines for Canadian Drinking Water Quality](#). Pesticides in water can be removed by treatment processes such as reverse osmosis. Regular testing of all water sources used throughout production and processing is recommended.
- Consider clarifying agents. Some studies have shown that the use of certain clarification agents can reduce pesticide contamination in wines, ciders, and beer, such as activated carbon. Ensure the clarifying agent used is approved for use in the product.

## FOR MORE INFORMATION

If you have questions about the information found in this fact sheet, please contact one of Perennia's specialist at:

### Quality and Food Safety

Phone: 902-896-0277

Email: [foodsafety@perennia.ca](mailto:foodsafety@perennia.ca)

or

### Food and Beverage Innovation Centre

Phone: 902-896-8782

Email: [innovation@perennia.ca](mailto:innovation@perennia.ca)

If you have questions regarding the established limits or product testing, please contact the NSLC at [product.testing@mynslc.com](mailto:product.testing@mynslc.com)

## REFERENCES

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[He, N. X., & Bayen, S. \(2020\). An overview of chemical contaminants and other undesirable chemicals in alcoholic beverages and strategies for analysis. Comprehensive Reviews in Food Science and Food Safety, 19\(6\): 3916-3950](#)

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