

E-Limit

frequently asked questions

This document answers some common questions on exposure limits and useful information on how to use **E-Limit, the exposure limit search tool.**

An **exposure limit** for a chemical or biological substance is the maximum airborne concentration to which it is believed workers may be repeatedly exposed over a working lifetime without adverse health effects. B.C. exposure limits are regulated and administered by WorkSafeBC. All employers under WorkSafeBC's jurisdiction must ensure that no workers are exposed to chemical substances exceeding the B.C. exposure limits.

WorkSafeBC has exposure limits for about 800 substances, provided in the [Table of Exposure Limits for Chemical and Biological Substances](#). It can be difficult to search the table and find the relevant information you need, particularly when using a mobile device. To assist with this type of search, WorkSafeBC has developed E-Limit.

Key features of the E-Limit search tool:

- Searchable by multiple parameters
- Central data source
- Optimized for mobile devices, but can also be used on a desktop or laptop
- Definitions to terminology associated with exposure limits



E-Limit is not designed to replace the judgment of qualified professionals — always consult an occupational hygienist or an occupational health and safety professional if you require assistance in interpreting an exposure limit. The tool is not intended to provide guidance on control measures to eliminate or minimize exposures in the workplace. E-Limit is designed specifically for British Columbia and does not include the regulatory exposure limits for other jurisdictions.

The [Exposure Limits](#) webpage on [worksafebc.com](https://www.worksafebc.com) contains more information about exposure limits and how they are determined.

How to use E-Limit

E-Limit is a searchable database of B.C. exposure limits and can be used to search for information about any substances included in the [Table of Exposure Limits](#). The following data is provided for each substance:

- Chemical name (e.g., asbestos, lead)
- Chemical Abstracts Service (CAS) number
- B.C. exposure limits (TWA, STEL, and/or ceiling limit) and the adverse health effects the exposure limits are intended to minimize
- Health hazard notations or designations (e.g., cancer, sensitizer, reproductive toxin, 2A, IARC)
- Immediately dangerous to life or health (IDLH) values
- Key regulatory requirements
- Definitions for key terms
- Common synonyms and chemical formulae for selected substances

Search tips

- To get the most accurate results, type in the full substance name into the search box (e.g., allyl chloride).
- For CAS numbers, type in the entire CAS number (e.g., either 50000 or 50-00-0).

Navigation

- Click on the word “E-Limit” to get back to the home page.
- Your search will display a list of up to 10 substances per page. If your search yields more than 10 results, you can use the drop-down arrow to change how many results that you would like to view per page.

Frequently Asked Questions

What are the different types of exposure limits?

Chemical and biological substances may have one or more of the following types of exposure limits:

- TWA— the time weighted average concentration of a substance in air which may not be exceeded over a normal 8-hour work period
- STEL — short-term exposure limit, the time weighted average concentration of a substance in air that may not be exceeded over any 15-minute period, limited to no more than 4 such periods in an 8-hour work shift with at least one hour between any 2 successive 15-minute excursion periods
- Ceiling limit — the concentration of a substance in air that may not be exceeded at any time during the work period

How are exposure limits in B.C. determined?

Visit our [Exposure Limits](#) webpage for information.

Where does the information in E-Limit come from?

E-Limit is a centralized data source, drawing information from the following:

- Occupational Health and Safety Regulation
- Occupational Health and Safety Policy items
- Occupational Health and Safety Guidelines
- American Conference of Governmental Industrial Hygienists (ACGIH)
- International Agency for Research on Cancer (IARC)

Where can I find definitions for terms that I don't understand?

E-Limit includes a [glossary of terms and notations](#).

Do I need internet access or a cellular data connection to use E-Limit?

Yes, although E-Limit is optimized for mobile devices, it is a web app, not a mobile app, so you will need internet access to use it.

Can I use advanced search features in E-Limit?

No, E-Limit's search function cannot perform wildcard or Boolean searches. E-Limit also does not allow searching by any of the following:

- Numerical value of a B.C. exposure limit
- Word fragments with too few letters
- Tradenames, most common names, or generic names (e.g., paint, alcohol, Difolatan)

What does it mean when the result shows “- -”?

If two dashes “- -” appear in one of the exposure limit rows (TWA, STEL, and/or Ceiling Limit), it indicates there are no current B.C. exposure limits for this substance. For some substances, the “Notes & Notation” section has further information.

Does E-Limit include the lower explosive limit (LEL) values?

LEL values are not included in the tool, but the notation “EX” indicates that the substance is a flammable asphyxiant or that excursions above the exposure limit could approach 10% of the lower explosive limit.

Can I download or export selected E-Limit data to a file?

E-Limit does not have a download or export function, but you can either print the page or copy your search results and paste them into another file format (e.g., a word processing file) to save or print.

How do I know if I'm correctly applying an exposure limit at my workplace?

For assistance in applying an exposure limit, consult with a qualified professional or call the WorkSafeBC Prevention Information Line: 604.276.3100 (Lower Mainland) or 1.888.621.7233 (1.888.621.SAFE) (toll-free in Canada).

Who can I contact if I have a technical problem with E-Limit?

For technical issues, please contact our [Technical Support Desk](#).

How can I share suggestions to improve E-Limit or report an error?

We appreciate your ideas and feedback. Please email our team at elimit@worksafebc.com.

Where can I find the relevant regulatory information on exposure limits?

The relevant OHS Regulation and related information can be found on worksafebc.com.

Relevant OHS Regulation sections:

- 5.48 Exposure limits
- 5.49 Excursion limits
- 5.50 Extended work periods
- 5.51 Additive effects
- 5.52 Skin designation
- 5.53 Workplace monitoring
- 5.54 Exposure control plan
- 5.55 Type of controls
- 5.56 Oxygen deficiency
- 5.57 Designated substances
- 5.58 Protective policy

Relevant OHS Policy item:

- R5.48-1 Controlling Exposure — Exposure Limits

Relevant OHS Guidelines:

- G5.49 Application of excursion limits
- G5.50 Extended work periods
- G5.51 Additive effects
- G5.52 Skin notation
- G5.53-4 Occupational hygiene methods acceptable to WorkSafeBC
- G5.54-1 Exposure control plan
- Table of Exposure Limits for Chemical and Biological Substances