UNIVERSITY OF TORONTO | Environmental Health & Safety

Guidelines for Purchasing, Modifying, and Transferring Laser Products

Background

This guideline applies to researchers and staff at the University of Toronto who purchase laser products for research, teaching or other purposes from both local and international vendors, manufacturers, or distributors.

Health Canada regulates the sale, lease and import of laser products in Canada under the authority of the Radiation Emitting Devices Act (REDA). As of October 9, 2025, updates to the Radiation Emitting Devices Regulations (REDR) under the REDA will come into force and apply to all classes of Laser Products sold in Canada. The updated regulations bring engineering and labelling requirements in line with international standards and add Canada-specific requirements. This guide is designed to provide U of T researchers and staff direction when considering the purchase, modification and/or transfer of laser products.

What are lasers and laser products?

A laser is a device that emits a very narrow beam of focused light. A laser product may be the laser itself, such as a laser pointer used in a classroom, or a product that contains a laser which can include a wide range of equipment from laser cutters/engravers in makerspaces to highly specific analytical lasers used in research.

What should I look for when purchasing laser products?

If a laser product is purchased from a local business, vendor or distributor, it is the local entity's responsibility to comply with the requirements under the REDA/R as they are generally considered the manufacturer, importer or vendor.

- Researchers and staff should always purchase lasers or laser products from reputable Canadian vendors, where possible.

When purchase of a laser product from a local vendor is not possible and foreign business must be used, the University, researcher or staff member is considered the importer and thus is responsible for ensuring the laser product meets the requirements under the REDA. Laser products that are not in compliance with REDA are subject to seizure at the border by customs officers. EHS can provide assistance to researchers and staff in advance when planning to purchase or procure laser products.

Researchers and staff should check that lasers and laser products meet the following requirements when making a purchase or procurement after October 9, 2025:

- Classification into 1 of 8 laser hazard classes (i.e., 1, 1M, 1C, 2, 2M, 3R, 3B or 4)
- Compliance with applicable built-in engineering safety features according to IEC standards (can be identified with "IEC 60825-1" marking on product label or information)
- Bilingual labelling and product information, showing the laser class and applicable warnings in both English and French

Laser products used for non-research purposes

As of October 9, 2025, staff should purchase laser products from local Canadian vendors where possible. Laser products used for non-research purposes (e.g. laser pointers, lasers in projectors, 3D printers, enclosed laser engravers, etc.) are subject to the updated REDA regulations and must meet the minimum engineering, labelling and classification requirements outlined above.

Laser products used for research

As of October 9, 2025, researchers and staff should purchase laser products from local Canadian manufacturers/vendors/distributors when and where possible.

- Class 3B and 4 laser products used at the University of Toronto are regulated by the University's Laser Safety Program and must be registered with the EHS Radiation Protection Service (RPS). EHS will verify compliance with REDA during registration of new Class 3B and 4 laser products and regular lab inspections for lasers purchased after the effective date.
- For lower-class laser products that do not require registration under the University's Laser Safety Program, EHS will provide support and guidance when purchasing Class 1, 1C, 1M, 2, 2M, and 3R laser products.
- Researchers and staff should retain records related to the importation, testing and classification, and/or manufacturing of laser products (as applicable) obtained after October 9, 2025.

I am a researcher who intends to modify or transfer a laser product. What am I required to do?

If a modification of a previously classified laser product affects the original performance or intended function, the researcher must ensure the laser product is reclassified and that it meets the requirements under the REDA. The EHS Radiation Protection Service will verify compliance and can assist with reclassification and labelling.

If a researcher intends to transfer (lease, lend, donate, etc.) a laser product from the University of Toronto to an external party after October 9, 2025, the researcher must ensure the laser product meets the classification, engineering and labelling criteria prior to the transfer. All researchers with Class 3B and 4 laser products are required to submit a "Laser Transfer Form" to EHS for review and approval prior to transfer.

Questions or Require Assistance?

If you have questions about purchasing, transferring, or modifying laser products, contact EHS at:

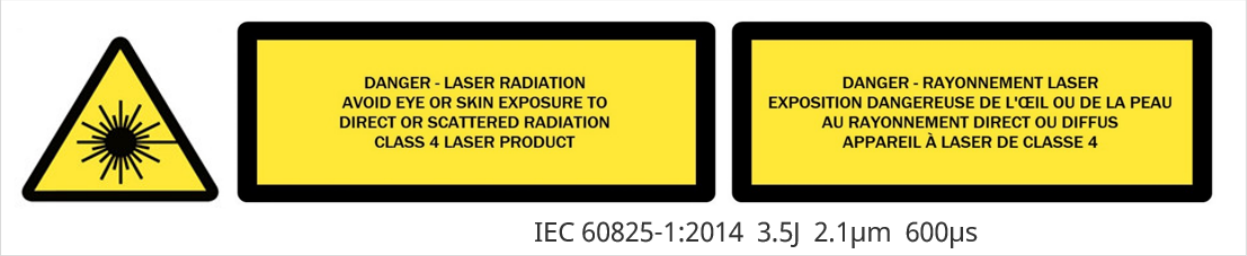
Radiation Protection Service
Environmental Health & Safety
E-mail: ehs.rps@utoronto.ca
Phone: (416) 978-4467

References

- Guidance for laser products, including information about the IEC 60825-1 standard
- Canada Gazette, Part II, Volume 158, Number 21
- Radiation Emitting Devices Regulations – Laser products

Appendix – Samples of Approved IEC Labels

Sample 1: typical laser hazard labels as per IEC standards*



- ☑ laser hazard symbol (per IEC 7.1)
- ☑ explanatory (hazard class and warnings, per IEC 7.7)
- ☑ standard name & date (per IEC 7.9)
- ☑ maximum output
- ☑ emitted wavelength(s)
- ☑ pulse duration (if appropriate)
- ☑ in both English & French

As provided by the

Sample 2: alternative laser hazard labels as per IEC standards*

- ☑ alternative format
- ☑ standard name & date
- ☑ maximum output
- ☑ emitted wavelength(s)
- ☑ pulse duration (if appropriate)
- ☑ in both English & French

*Provided by the Consumer & Clinical Radiation Protection Bureau of Health Canada