



Standard Operating Procedure Document			
Title:	Cryogenics		
SOP #:	PBSOP005	Rev #:	2

Standard Operating Procedure	
Title:	Cryogenics
Issue Date:	08-May-24
SOP #:	PBSOP005
Revision #:	2

This is a controlled document, authored and maintained by the Joint Health and Safety Committee (JHSC) at the Leslie Dan Faculty of Pharmacy, University of Toronto.

All information contained in this document is the property of the Leslie Dan Faculty of Pharmacy, University of Toronto.

David Dubins

08-May-24

Author of this Revision:
David Dubins, Ph.D.
Member, Joint Health and Safety Committee

Date

Nirmal Goonewardena

07-May-24

Reviewed by:
Nirmal Goonewardena
Faculty Technician
Member, Joint Health and Safety Committee

Date

Paul Grootendorst

22-May-2024

Approved by:
Paul Grootendorst, Ph.D.
Associate Professor
Chair, Joint Health and Safety Committee

Date

Lisa Dolovich

22-May-2024

Authorized by:
Lisa Dolovich BScPhm PharmD MSc
Professor and Dean

Date



UNIVERSITY OF TORONTO
LESLIE DAN FACULTY OF PHARMACY

Standard Operating Procedure Document			
Title:	Cryogenics		
SOP #:	PBSOP005	Rev #:	2



Standard Operating Procedure Document			
Title:	Cryogenics		
SOP #:	PBSOP005	Rev #:	2

1. Scope

The scope of this SOP is to provide building-specific details regarding the safe transport and use of cryogenic fluids in the Leslie Dan Faculty of Pharmacy.

This SOP is not intended to replace, supersede, or contravene any of the policies or training outlined by the Office of Environmental Health and Safety (OEHS), available online via the following website:

<https://ehs.utoronto.ca/resources/>

The SOP is intended to clarify how site-specific aspects of OEHS policies are dealt with in order to ensure they are appropriately implemented. OEHS policies will not be re-iterated in this document, but rather the reader is referred to the link above, to the Policies and Procedures Listing Health and Safety Manual.

2. Objective

The objective of this SOP is to outline the appropriate training, resources, policies, and the building-specific procedures pertaining to cryogenic fluids (specifically liquid nitrogen) in the Leslie Dan Faculty of Pharmacy.

3. Background

The Leslie Dan Faculty of Pharmacy is an organization committed to protecting and monitoring the health and safety of people in the building. The Joint Health and Safety Committee is the body responsible for overseeing this important task and reporting to the OEHS at the University of Toronto. SOPs are now required by the OEHS. This series of SOPs are compliant with this requirement.

4. Definitions and Abbreviations

Abbreviations used in this document are defined in this section:

SOP	Standard Operating Procedure
JHSC	Joint Health and Safety Committee of the Leslie Dan Faculty of Pharmacy, at the University of Toronto
OEHS	The Office of Environmental Health and Safety, University of Toronto
TBD	To be determined
N/A	Not Applicable
Rev.	Revision



Standard Operating Procedure Document			
Title:	Cryogenics		
SOP #:	PBSOP005	Rev #:	2

5. Policies

1. Two resources are available concerning cryogens on the OEHS website, under the policies and procedures section: <https://ehs.utoronto.ca/resources/policies-and-procedures/>
 - [Control Program for Liquid Cryogenic Transfer Facilities \(PDF file\)](#)
 - [Standard for Inert Cryogenic Liquid Usage in the Laboratory \(PDF file\)](#)
2. Safety training for graduate students and research associates is a Faculty requirement, and occurs twice yearly in the Leslie Dan Faculty of Pharmacy. Cryogenics is a component of the safety training course.
3. Students or faculty wishing to use cryogenic fluids must be authorized to do so, and shall be appropriately trained in the departmental safety training course.
4. The Leslie Dan Faculty of Pharmacy does not have its own cryogenics facility.
5. Cryogenics are to be obtained by each lab in small quantities from the Medical Sciences Building or on a contractual basis from other providers.

6. Procedures

6.1.1 Cryogenic Procedures

1. Equipment-specific procedures and guidelines pertaining to cryogenics are provided to the students during the departmental safety training course.
2. Refer to hand-outs of this course for the proper cryogenics procedures.
3. Use of cryogenics must be in accordance with the training provided.

6.1.2 Cryogenic Fluid Transport

1. Any elevator in the building (passenger or freight) may be used to transport cryogenic fluids, in quantities totaling less than 10 Litres. The service elevator is the preferred method of transport, and should be used if available.
2. Large quantities of cryogenic fluids must not be transported via elevator in the building (>10 Litres).
3. Cryogenic fluids must be transported in vessels approved for their storage and transport.



Standard Operating Procedure Document			
Title:	Cryogenics		
SOP #:	PBSOP005	Rev #:	2

7. Revision History

Revision #	Date	SOP Section(s)	Revision Description	Revised By
0	20-Mar-12		SOP PBSOP005 created.	David Dubins (author)
1	05-Dec-17	1, 5.1	Updated web links to OEHS.	David Dubins (reviser)
2	08-May-24	6.1.2.1	Updated signatories and links. Corrections made by Tina Harvey-Kane.	David Dubins (reviser)