FLORIDA A&M UNIVERSITY

DIVISION OF PHYSICAL THERAPY

Florida Agricultural & Mechanical University (FAMU)

School of Allied Health Sciences (SOAHS)

Standard Operating Procedures (SOP)

Manual for the Use of Human Anatomical Specimens

2025-2026

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1. Mission:

The School of Allied Health (SOAH) is a Florida Agricultural and Mechanical University (FAMU) run program that is identified by the state as an organization responsible for receiving, storing, and utilizing human cadavers for the primary purpose of education. As such, SOAH must comply with the rules, regulations, and standard operating procedures established by the Florida Anatomical Board (the Board) and the State of Florida.

The Mission of the anatomical program associated with SOAH is to utilize human specimens to enhance and improve the education of graduate students who plan on eventually working within the medical field of Physical Therapy or Occupational Therapy. In addition, SOAH also provides educational enhancement for graduate students within the College of Science and Technology (Department of Biological Sciences) to learn and benefit from the use of anatomical specimens. SOAH will manage all Anatomical Board approved body donor resources and ensure that all involved with the handling of specimens will do so in a dignified, respectful and professional manner, and thereby ensure that every health professional utilizing these resources is well-educated to enhance the health and well-being of all people as paraphrased from the Board's mission statement.

The main office of SOAH is located in Lewis-Beck Building Suite 306 of FAMU main campus in Tallahassee, Florida. Anatomical specimens will be received, stored, and utilized in room 001B of Lewis-Beck building. The additional program utilizing the facilities includes the College of Science and Technology Department of Biological Sciences (CST-DBS), the chair of said program is located in room 211 Jones Hall of FAMU main campus.

1.1 Anatomy Education

Preface: Gross Anatomy Teaching Laboratories are rated as Biosafety Level 2 and there is a moderate potential hazard to personnel and the environment. Therefore, all participants in the laboratory shall observe safety precautions and security regulations as described below.

1.1.a. Biosafety Requirements

• **Pledge of Respect:** All individuals requesting access to the laboratory shall promise to follow the rules governing use of Human cadavers in teaching, research, and sign a "Pledge of Respect" document acknowledging these requirements. Forms will be administered by the faculty Instructor of the course; the signed and dated form will be kept on file for the duration of the course.

• **Required Training:** Entrants to the laboratory are required to be training on the potential hazards associated with the work involved, the necessary precautions to prevent exposures, and the exposure evaluation procedures deemed necessary by the Environmental Health and Safety office at that facility. Such training may include, but is not limited to blood-borne pathogen training (required annually) and Laboratory Safety Training. Laboratory safety procedures will be provided in writing and verbally communicated to every incoming group of students or trainees prior to the first gross anatomy laboratory session.

1.1.b. Approved University Courses and Class Purpose: Observation and/or dissection of cadavers shall be solely designated for graduate and undergraduate students in affiliation with the School of Allied Health and College of Science and Technology (Biological Sciences Department). These students shall be enrolled in the program and in a formal course, elective, module, or program sanctioned by the university. The current courses listed as containing anatomy content with clearly defined educational goals, outcomes and have been identified on the Specimen Request Form include Gross Anatomy Lecture and Lab (OTH 5241 and PHT 5115), and Neuroanatomy (OTH 5245 and PHT 5166). Permission for participation in the lab includes all students, relevant school faculty/instructors, volunteer clinical faculty (involved in the respective educational program), and anatomy

laboratory support staff (for preparation and management of anatomical material). It also includes all staff required for emergent situations during educational activities such as janitorial staff, facilities maintenance, IT management staff as needed for cleaning or repair work when cadavers are in view during laboratory sessions.

- All of the above-mentioned individuals shall complete and sign an Anatomical Board Pledge of Respect form prior to entering a laboratory with cadavers in view. These forms will be kept on file by the respective directors or chairperson over the program utilizing the lab space.

1.1.c. Non-University Course Use of Lab Space: In compliance with the Anatomical Board, pre-high school, high school, or undergraduate college students not associated with the course programs mentioned will not be allowed to enter or be given tours of anatomy laboratories when any human cadavers or anatomical specimens are in view. Exceptions to this include high school students enrolled in an educational course/experience with clearly definable educational goals and outcomes that may require studies using skeletons and isolated organs in rooms without cadavers or if the School of Allied Health is conducting interviews/tours of their facilities for prospective graduate students.

- Prior to bringing students into the laboratory, students shall be given an orientation preparing them for the activity they will be engaged.

- Students must complete and sign an Anatomical Board Pledge of Respect form prior to entering a laboratory with cadavers in view. These forms shall be kept on file by the respective programs.

1.1.d. Removal of Specimens from lab: In compliance with the Anatomical Board, no cadavers or anatomical specimens obtained from the Board will leave the approved laboratory for use in any other location in the institution or at any other location that is not an Anatomical Board approved facility.

1.2. Video Recording or Digital Photography in the Anatomy Laboratory

1.2.a. All students shall be informed prior to a course, module or elective that any non-educational video or photography of any type of a cadaver or anatomical specimen in the anatomy laboratory is prohibited.

1.2.b. Video or still photography by faculty or students of non-specimen bones, models, or figures can only be done when cadavers are not in display or visibly observable.

1.2.c. Exceptions to the rule of no Video or still photography of cadavers by faculty or students is only permissible for educational purposes or to document findings related to cause of death using the following guidelines:

- Students or faculty are informed that under no circumstances should videos or photographs be allowed to be put on to the public internet or any other public venue. They can only be used within the institution's password protected intranet that is only accessible by students, faculty, and designated staff (i.e. for video editing).

- Videos or photographs used for educational purposes must not display any identifiable features such as tattoos, shots of the face to include full or side profiles.

1.3. Non-educational Use of Anatomical Specimens

Any and all non-educational use of cadavers on FAMU campus, such as research must have prior approval by the Department and the College program planning on utilizing anatomical specimen and approval from the School of Allied Health, and the Anatomical Board or the Executive Director on behalf of the Anatomical Board.

1.3 a. Non-educational research use of cadaver permission requests must be written and addressed to the Dean of Allied Health, the Director of Physical Therapy, the Director of Occupational Therapy, the associated Dean and Division Director/Department Chair of the program planning on utilizing the cadavers. These requests must include a detailed explanation of the non-educational use of the cadavers and a list of those individuals (e.g., faculty and students) that are not involved in anatomical education, but will be working with the cadavers.

1.3.b. Privacy Rules apply to research on decedents, and thus all research projects on cadavers and/or human specimens provided by the Anatomical Board must have the following:

- A memorandum of intent submitted and signed by all parties involved
- A Submission of a Request for Decedent Research Form to the Board for approval.
- A Submission of a Request for Research Form to the Executive Director of the Anatomical Board for approval.

1.3.c. All individuals involved in non-educational use of cadavers shall complete and sign an Anatomical Board Pledge of Respect form prior to entering a laboratory with cadavers in view. These forms shall be kept on file by the respective programs.

2. Approved Teaching Facility:

Preface: Gross Anatomy Teaching Laboratories are rated as Biosafety Level 2 meaning there is a moderate potential hazard to personnel and the environment. Therefore, all participants in the laboratory shall observe the designated safety precautions and security regulations as described in this document. Specific regulations will differ slightly between classes and any associated facility that is not attached to the main depository. Copies of all regulations to be observed at each facility are attached to this document, and will be made available to all participants in each laboratory course. Regulations will be updated and modified as needed.

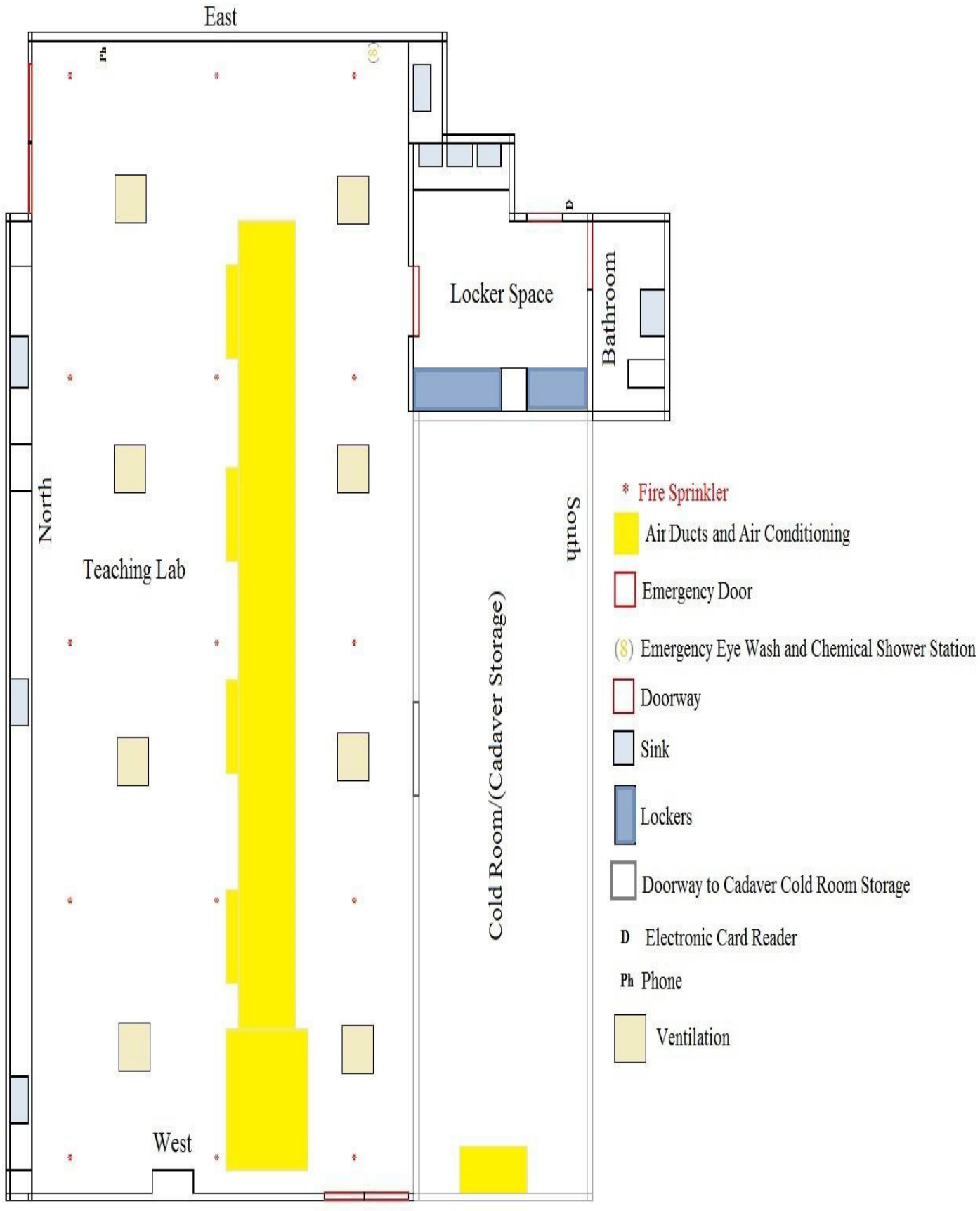
2.1. Location of Approved Facility

The location of the Depository for Anatomical Specimens is housed in room 107 of the Lewis-Beck building 334 Palmer Ave Tallahassee, Florida 32307. Administration of the use of this facility is via the School of Allied Health Sciences.

2.2. Facility Floor plan

The depository is made up of several spaces including: a cold-room storage, teaching lab, locker space, and a bathroom. The facility meets the need for both handicapped and non-handicapped personnel. The entrance to the lab is found on the west side of the hallway leading to the room but on the east wall of the locker room. The entrance is magnetically

locked and linked to an electronic card reader which only opens the door with proper approved FAMU ID. The card can open the door from the outside but a motion detector unlocks the door from the inside. This is the main entrance to the depository space/teaching lab but the room can be accessed via the emergency exits located on the north-east corner and the south-west corner of the teaching lab. Cadavers are stored in a cold room to the south of the teaching lab. Students store personal items and associated lab materials in the lockers on the west wall of the locker space. The teaching lab is approximately 50 feet in length by 25 feet wide by 13 feet in height giving total cubic feet of 16,250. There is an emergency eye wash and shower in the south-east corner of the teaching lab and a first aid kit located in the upper cabinet on the north wall nearest the emergency exit. There is air conditioning and ventilation for the teaching lab and air conditioning for the cold room. Additionally, the teaching lab contains a fire alarm, smoke detector, fire extinguisher, and fire sprinklers in case of fire.


East
Ph
(8)
D
Locker Space
Bathroom
North
Teaching Lab
South
Cold Room/(Cadaver Storage)
West
* Fire Sprinkler
Air Ducts and Air Conditioning
Emergency Door
(8) Emergency Eye Wash and Chemical Shower Station
Doorway
Sink
Lockers
Doorway to Cadaver Cold Room Storage
D Electronic Card Reader
Ph Phone
Ventilation

3. Access to Teaching Laboratory Facilities:

Preface: Access to the teaching laboratories is restricted to designated students, staff and faculty. These individuals will have access during times specified by each facility and faculty member. All approved individuals shall complete an appropriate Pledge of Respect Form associated with their level of authorization or access to the FAMU human specimen depository and lab.

3.1. Approved Teaching Faculty: Approved faculty include all teaching faculty who will be teaching course material in the teaching portion of the depository and utilizing the human specimens stored in the cold room. This also includes any and all instructors, teaching assistants, and exam proctors who meet the approved requirements.

3.2. Approved Non-Teaching Staff: Approved non-teaching staff includes but are not limited to janitorial staff, maintenance personnel, environmental health inspectors, and IT employees all of whom may need access to the depository to ensure facility upkeep and continued functionality.

3.3. Approved Students: Approved students included any and all students who are taking administered courses being housed in the depository facility, have met the approved training, and have signed the Anatomical Board Pledge of Respect.

3.4. Visitation of facilities: No visitors are allowed in the facilities at any time, except by permission of an accompanying faculty member or designated staff, or written permission from The Executive Director or their appointed representative.

3.5. Special at-risk individuals: Persons with medical conditions (allergies, pregnancy) or who are at increased risk of acquiring infection should undergo risk evaluation before entering the laboratory.

3.6. "Pledge of Respect" Forms: an appropriate Pledge of Respect Form shall be read, and signed by each individual who seeks authorization or access to the FAMU human specimen depository and lab. There are forms for faculty, staff, students, and visitors. Once signed, the form will remain kept by SOAHS for the duration of the authorization for that individual. These forms can be found below.

3.6.a. Pledge of Respect for Faculty

Florida Agricultural & Mechanical University
School of Allied Health Sciences
334 W Palmer Ave Lewis Beck Suite 306
Tallahassee FL 32307
Telephone: 1-850-599-3818

ANATOMICAL BOARD OF THE STATE OF FLORIDA

Miami Office:
University of Miami
Miller School of Medicine
Office of Medical Education
P.O. Box 016960 (R-160)
Miami, FL 33101
Telephone: 305-243-6691

Orlando Office:
University of Central Florida
College of Medicine
Health Sciences Campus-Lake Nona
6850 Lake Nona Blvd.
Orlando, FL 32827-7408
Telephone: 407-266-1142

Tallahassee Office:
Florida State University
College of Medicine
1115 West Call Street
Box30043000
Tallahassee FL 32306-4300
Telephone: 850-645-8449

Gainesville Office:
University of Florida
College of Medicine
Health Science Center
PO Box 100235
Gainesville, FL 32610-0235
Telephone: 352-392-3588

Pledge of Respect

Policies and Procedures Applicable to (Name of University)_____ **Faculty.**

Once a donated human anatomical specimen is made accessible to a faculty member of the (Name of University)_____, the responsibility for the security and proper storage of the human anatomical specimen is that of the faculty member and the faculty member's program. Consonant with this responsibility, and in addition to forms to be completed as required by the Anatomical Board of the State of Florida, every faculty member having access to human anatomical specimens will be required to sign the following pledge prior to receiving a donated human anatomical specimen provided by the Anatomical Board:

Pledge of Respect for the Sanctity of Donated Human Anatomical Specimens

I, the undersigned faculty member, recognize that the bequest of human remains to the Anatomical Board of the State of Florida represents a direct and important contribution to medical teaching and research. Such donations allow health professional faculty and students the opportunity to closely examine, evaluate, and understand the detailed structure of the human body. Further, the caring and thoughtfulness of such bequests provides physicians and research scientists with the opportunity to gain knowledge that may prolong, improve, or save someone's life. Without such bequests, medical science and health care would suffer devastating setbacks.

In recognition of the generosity of such bequests, I understand that the policy of the Anatomical Board of the State of Florida is to treat donated human anatomical specimens with the utmost respect and gratitude at all times, and I pledge to comply with this policy. I acknowledge HIPAA and other privacy regulations continue to protect individuals' health information after death. I also acknowledge that NO PHOTOGRAPHY of any part of any human specimen is permitted without permission from the Executive Director of the Anatomical Board. I further pledge that the donated human anatomical specimens to which I have access will remain in specific teaching/research rooms or storage space approved for such use by the Anatomical Board, unless a signed authorization for transfer elsewhere has been executed by the Executive Director of the Anatomical Board of the State of Florida or his/her authorized designee. I further pledge to comply with all applicable requirements for timely return of human anatomical specimens to the Anatomical Board of the State of Florida.

If I am or become a course instructor for a course which requires access to human anatomical specimens, I pledge that I will allow no individuals other than authorized faculty and students/ participants registered in my course/program to view or to have access to any human anatomical specimens to which I have access without written authorization from the Executive Director of the Anatomical Board of the State of Florida or his/her authorized designee.

_____ _____
Signature Date

Typed or Printed Name: _____

Title: _____

Department/College: _____

4.1.a. Pledge of Respect for Employees/Staff

ANATOMICAL BOARD OF THE
STATE OF FLORIDA

Florida Agricultural & Mechanical University
School of Allied Health Sciences
334 W Palmer Ave Lewis Beck Suite 306
Tallahassee FL 32307
Telephone: 1-850-599-3818

Miami Office:
University of Miami
Miller School of Medicine
Office of Medical Education
P.O. Box 016960 (R-160)
Miami, FL 33101
Telephone: 305-243-6691

Orlando Office:
University of Central Florida
College of Medicine
Health Sciences Campus-Lake Nona
6850 Lake Nona Blvd.
Orlando, FL 32827-7408
Telephone: 407-266-1142

Tallahassee Office:
Florida State University
College of Medicine
1115 West Call Street
Box30043000
Tallahassee FL 32306-4300
Telephone: 850-645-8449

Gainesville Office:
University of Florida
College of Medicine
Health Science Center
PO Box 100285
Gainesville, FL 32610-0235
Telephone: 352-392-3588

Pledge of Respect

Policies and Procedures Applicable to (Name of University)_____
_____ **Employees Who Are Not Faculty, Residents or Students.**

Whenever a donated human anatomical specimen is made accessible to a (Name of University) _____ employee, as part of their assigned work, the employee will be required to sign the following pledge prior to having access to a donated human anatomical specimen provided by the Anatomical Board:

Pledge of Respect for the Sanctity of Donated Human Anatomical Specimens

I, the undersigned employee, recognize that the bequest of human remains to the Anatomical Board of the State of Florida represents a direct and important contribution to medical teaching and research. Such donations allow health professional faculty and students the opportunity to closely examine, evaluate, and understand the detailed structure of the human body. Further, the caring and thoughtfulness of such bequests provides physicians and research scientists with the opportunity to gain knowledge that may prolong, improve, or save someone's life. Without such bequests, medical science and health care would suffer devastating setbacks.

In recognition of the generosity of such bequests, I understand that the policy of the Anatomical Board of the State of Florida is to treat donated human anatomical specimens with the utmost respect and gratitude at all times, and I pledge to comply with this policy. I acknowledge HIPAA and other privacy regulations continue to protect individuals' health information after death. I also acknowledge that NO PHOTOGRAPHY of any part of any human specimen is permitted without permission from the Executive Director of the Anatomical Board. I further pledge that the donated human anatomical specimens to which I have access will remain in teaching/research rooms or specific storage space approved for such use by the Anatomical Board, unless a signed authorization for transfer elsewhere has been executed by the Executive Director of the Anatomical Board of the State of Florida or his/her authorized designee. I further pledge to comply with all applicable requirements for timely return of human anatomical specimens to the Anatomical Board of the State of Florida.

_____ _____
Signature Date

Typed or Printed Name: _____

Title: _____

Department/College: _____

4.1.b. Pledge of Respect for Student

Florida Agricultural & Mechanical University
School of Allied Health Sciences
334 W Palmer Ave Lewis Beck Suite 306
Tallahassee FL 32307
Telephone: 1-850-599-3818

ANATOMICAL BOARD OF THE STATE OF FLORIDA

Miami Office:
University of Miami
Miller School of Medicine
Office of Medical Education
P.O. Box 016960 (R-160)
Miami, FL 33101
Telephone: 305-243-6691

Orlando Office:
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College of Medicine
Health Sciences Campus-Lake Nona
6850 Lake Nona Blvd.
Orlando, FL 32827-7408
Telephone: 407-266-1142

Tallahassee Office:
Florida State University
College of Medicine
1115 West Call Street
Box30643000
Tallahassee FL 32306-4300
Telephone: 850-645-8449

Gainesville Office:
University of Florida
College of Medicine
Health Science Center
PO Box 100235
Gainesville, FL 32610-0235
Telephone: 352-392-3588

Pledge of Respect

Policies and Procedures Applicable to (Name of University) _____ **Students and Residents/Fellows.**

Once a donated human anatomical specimen is made accessible to a faculty member of the (Name of University) _____, the responsibility for the security and proper storage of the human anatomical specimen is that of the faculty member and the faculty member's program. Consonant with this responsibility, every student and resident having access to human anatomical specimens under the supervision of the faculty member will be required to sign the following pledge prior to having access to a donated human anatomical specimen provided by the Anatomical Board:

Pledge of Respect for the Sanctity of Donated Human Anatomical Specimens

I, the undersigned student, resident or fellow, recognize that the bequest of human remains to the Anatomical Board of the State of Florida represents a direct and important contribution to medical teaching and research. Such donations allow health professional faculty and students the opportunity to closely examine, evaluate, and understand the detailed structure of the human body. Further, the caring and thoughtfulness of such bequests provides physicians and research scientists with the opportunity to gain knowledge that may prolong, improve, or save someone's life. Without such bequests, medical science and health care would suffer devastating setbacks.

In recognition of the generosity of such bequests, I understand that the policy of the Anatomical Board of the State of Florida is to treat donated human anatomical specimens with the utmost respect and gratitude at all times, and I pledge to comply with this policy. I acknowledge HIPAA and other privacy regulations continue to protect individuals' health information after death. I also acknowledge that NO PHOTOGRAPHY of any part of any human specimen is permitted without permission from the Executive Director of the Anatomical Board. I further pledge that the donated human anatomical specimens to which I have access will remain in specific teaching/research rooms or storage space approved for such use by the Anatomical Board, unless a signed authorization for transfer elsewhere has been executed by the Executive Director of the Anatomical Board of the State of Florida or his/her authorized designee. I further pledge to comply with all applicable requirements for timely return of human anatomical specimens to the Anatomical Board of the State of Florida.

_____ _____
Signature Date

Typed or Printed Name: _____

Title: _____

Department/College: _____

4.1.c. Pledge of Respect for Visitors/ Invited Guests

ANATOMICAL BOARD OF THE
STATE OF FLORIDA

Miami Office:
University of Miami
Miller School of Medicine
Office of Medical Education
P.O. Box 016960 (R-160)
Miami, FL 33101
Telephone: 305-243-6691

Orlando Office:
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College of Medicine
Health Sciences Campus-Lake Nona
6850 Lake Nona Blvd.
Orlando, FL 32827-7408
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Tallahassee Office:
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1115 West Call Street
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Telephone: 352-392-3588

Florida Agricultural & Mechanical University
School of Allied Health Sciences
334 W Palmer Ave Lewis Beck Suite 306
Tallahassee FL 32307
Telephone: 1-850-599-3818

Pledge of Respect

Policies and Procedures Applicable to Invited Guests of the (Name of University) _____

Once a donated human anatomical specimen is made accessible to a faculty member of the (Name of University) _____, the responsibility for the security and proper storage of the human anatomical specimen is that of the faculty member and the faculty member's program. Consonant with this responsibility, every invited guest having access to human anatomical specimens under the auspices of the faculty member will be required to sign the following pledge prior to having access to a donated human anatomical specimen provided by the Anatomical Board:

Pledge of Respect for the Sanctity of Donated Human Anatomical Specimens

I, the undersigned invited guest, recognize that the bequest of human remains to the Anatomical Board of the State of Florida represents a direct and important contribution to medical teaching and research. Such donations allow health professional faculty and students the opportunity to closely examine, evaluate, and understand the detailed structure of the human body. Further, the caring and thoughtfulness of such bequests provides physicians and research scientists with the opportunity to gain knowledge that may prolong, improve, or save someone's life. Without such bequests, medical science and health care would suffer devastating setbacks.

In recognition of the generosity of such bequests, I understand that the policy of the Anatomical Board of the State of Florida is to treat donated human anatomical specimens with the utmost respect and gratitude at all times, and I pledge to comply with this policy. I acknowledge HIPAA and other privacy regulations continue to protect individuals' health information after death. I also acknowledge that NO PHOTOGRAPHY of any part of any human specimen is permitted without permission from the Executive Director of the Anatomical Board. I further pledge that the donated human anatomical specimens to which I have access will remain in specific teaching/research rooms or storage space approved for such use by the Anatomical Board, unless a signed authorization for transfer elsewhere has been executed by the Executive Director of the Anatomical Board of the State of Florida or his/her authorized designee. I further pledge to comply with all applicable requirements for timely return of human anatomical specimens to the Anatomical Board of the State of Florida.

_____ _____
Signature Date

Typed or Printed Name: _____

Title: _____

Department/College: _____

4.2. Minimum number of individuals allowed in lab:

4.2.a. In Teaching lab while cadavers are in cold storage room the minimum number of people is one if the person is an approved faculty or staff. However, approved students or visitors must have an approved accompanied faculty or staff with them.

4.2.b. When cadavers are in teaching lab minimum number of individuals should be no less than two if the approved instructor is one of the two. Otherwise, in order to deal with any emergency that might affect an individual, the room should have minimum of three to allow for one person to stay with injured while the other seeks help.

Section II: Gross Anatomy Teaching Laboratory Policies and Procedures

1. Cadavers

Preface: The core premise behind the courses administered in association with human specimens is to have a full understanding of the working of the human body. Hence it is necessary that students going into a professional career, especially in the field of health care, have the opportunity to be exposed the intricate dynamics of the human anatomy as best as possible. This currently can only be achieved by the use of human specimen. Thus SOAHS is ensuring the best and most competitively qualified students in their fields by providing a location where students can learn with human specimens. These specimens are provided to SOAHS with the sole understanding that they are to be used for anatomy education.

1.1. Information of Facilities Providing Body Donors

1.1.a. Board Specimens

• Human anatomical specimens requested for use by teaching and/or research programs on FAMU campus, which have been inspected and approved pursuant to Chapter 406.59, Florida Statutes, will receive bodies from the Anatomical Board. These specimens shall meet the strict stands and guidelines necessary to protect the health and safety of all individuals involved in the handling of said specimen(s). Human specimens will be assigned an identifying number provided by the Anatomical Board which will remain with the human anatomical specimen from the time it is delivered to the time it is returned back to the Anatomical Board for the specimen to be cremated.

• Human anatomical specimens when delivered are kept in body storage bags (zippered disaster pouches) where the bodies will be kept for the duration of their use and returned in the bag upon retrieval by the Anatomical Board technician. The body and any tissues of sufficient mass will be identified as separate specimens removed as part of the study shall be returned in the bag

at the end of the use of the specimen(s). Furthermore, the metal tag with the identifying number must remain on the body at all times.

1.1.b. Donated bodies from other sources:

Human Specimens that are to be donated to the depository at FAMU must meet the requirements that are set by the Anatomical Board. For this purpose all human specimens to be stored at the FAMU depository must first be submitted to the Anatomical Board and must follow the strict procedures there in. Any funeral home interested and willing to submit bodies to FAMU must complete information and forms which are to be completed by the funeral home prior to the delivery of a human body to the Anatomical Board. The Funeral Home Information Packets will contain:

- Instructions for Anatomical Donations
- Forms Required for Anatomical Donations
- Vital Statistics Form
- Declaration of Consent Form for Surviving Relatives
- Declaration of Consent Form for Surviving Non-Relatives (i.e., Healthcare Surrogate, Guardian, Court-Appointed Representative Ad Litem, or Personal Friend). The Anatomical Board will not accept the deceased if the surviving relative or legally authorized non-relative objects to the use of the remains for education or research.
- Ashes Requested Form
- Permission to Dispose of Ashes Form

The above forms and information is available on the following websites:

- ***University of Florida***:
  http://anatbd.acb.med.ufl.edu/funeralhome/
- ***University of Miami:***

http://sofab.med.miami.edu/printable-forms

- ***University of Central Florida:***

https://med.ucf.edu/media/2016/08/funeral-packet-UCFCOM-new-2017-filable.pdf

1.1.c. Letter of Authorization

If the program and facilities are approved for the receipt of human anatomical specimens, the Anatomical Board will send a letter of authorization and will provide an authorization to transport specimens to approved facilities at time the specimens are received.

1.2. Obtaining and Transport of Registered Human Cadavers

1.2.a. Bodies obtained from the Anatomical Board are transported to and from the FAMU depository by a sanctioned and approved transportation provider.

1.2.b. Bodies that are donated from a funeral must first be transported to the appropriate facilities for secondary embalming at an approved Anatomical Board site. Delivery of a human body to the Anatomical Board requires the forms discussed in section II part 1.1.b. as well as a photocopy of the death certificate and a burial transit permit with cremation authorization from the medical examiner. Furthermore, the payment of costs incurred in performing the preliminary embalming and in transporting the human body to the Anatomical Board shall be the responsibility of the family of the deceased or the funeral home willing to donate the body. Once delivered to the Board transport of the bodies will be conducted by the above-mentioned board approved transportation provider.

1.3. Receiving and Storage of Human Anatomical Specimens Prior to Dissection

1.3.a. Approved Faculty associated with the FAMU depository with meet with the technicians of the Anatomical Board delivering the donated human remains to the designated loading dock area.

1.3.b. The Anatomical Board technician will place the human body onto dissecting tables which will then be placed into the refrigeration unit of the SOAHS FAMU Human Specimen Depository. Associated paperwork pertaining to the delivery of the specimen(s) will be signed and filed with SOAHS as needed.

1.3.c. The Anatomical Board assigns a number to the donated human body and thus the receiving party must ensure that each cadaver has an assigned number attached. This number will be used to identify the donated body throughout the time that the donated body is in the possession of SOAHS and upon return of said specimen(s) back to the Anatomical Board. The number will be engraved on a metal tag with a notation that the human anatomical specimen belongs to the Anatomical Board of the State of Florida and that the tag is not to be removed from the body.

1.3.d. The faculty assigned with the responsibility of the bodies while in the possession by SOAHS will ensure that the cold room is secure and only accessible by approved faculty, staff, students, and visitors. The cold room/refrigeration unit will be unlocked while human specimens need to be accessed but doors connecting to the lab will remain locked and only opened by approved authorized individuals.

1.3.e. SOAHS will ensure that donated bodies, or any parts from said bodies are not used for any other purpose outside of learning or training and will not be used for "Body Farms" or similar entities that use cadavers for forensic purposes, or allow bodies, or any parts to be displayed by the general public for educational, entertainment, or artistic purposes.

1.4. Handling of Human Remains after the Completion of Use

1.4.a. As per required by the Anatomical Board, the faculty are responsible for the return of the specimens after use in a timely fashion. If the specimens are required

beyond the time request then a written extension should be submitted and filed with the Anatomical Board. Material that may be retained for other teaching or training purposes, such as brains used in Neuroscience, will be turned over to the department requesting the material or if done with said material it can be sent to the Health Science Center Teaching Laboratories. The department receiving the material is then held responsible for the security, storage, and timely return of the material.

1.4.b. All material extracted from the human anatomical specimen that will not be kept for teaching purposes must be returned with the appropriate matching specimen. Tissue must be included in the cadaver bag and specimen must have ID tag attached.

1.4.c. Upon completion of the use of the human anatomical specimen(s), the cadavers will be returned to the Anatomical Board for cremation. To ensure the appropriate returned body specimen correlates with the specimen that was originally dropped off, the technicians will log into his/her logbook the return date and the specimen number and the submit that information back to the office of the Anatomical Board. Once the specimen(s) is/are removed from the depository and in the custody of the Anatomical Board technician it is no longer the responsibility of the SOAHS.

2. Student Responsibility

2.1. Student Access to Human Cadavers

Students cannot have access to human cadavers until the student signs either the Anatomical Board "Pledge of respect form" or the SOAHS modified "Pledge of respect which includes the standard expectations and SOP that the SOAHS has for each student. SOAHS "Pledge of respect" can be found in the SOP below. In addition, students must also complete the training on the FAMU blackboard system. Students must meet during appropriate class times and be responsible for preparatory and clean up procedures before and after each Laboratory Session.

2.1.a. SOAHS required "Pledge of Respect"

GROSS ANATOMY LABORATORY PLEDGE OF RESPECT

The bodies available for dissection were donated by individuals who wanted their remains to be used for education and research. As a health care practitioner, you are *favored* to have the opportunity to use this anatomical donation. The rules of the anatomy laboratory are based upon PATIENT PRIVACY, RESPECT, SECURITY, SAFETY, and MAINTENANCE. These rules will be observed in the laboratory **AT ALL TIMES**:

Respect

1. **The anatomical donors are to be treated with the utmost respect at all times**. Inappropriate or improper behavior and/or comments within and outside the laboratory is/are unacceptable.

2. The articulated skeletons, skulls and isolated bones are to be afforded the same respect as the cadavers.

3. **Do not remove the numbered tag from your cadaver.**

4. The cadavers are to be properly maintained. Any suspicion of mold or rot should be reported to the facility director immediately, since it can rapidly spread throughout the body and to other donors in the room. The plastic body bag should be closed after each dissection. **Take good care of your cadaver – it is the best teacher you have in this course.**

5. All cadaver waste tissues are to be properly disposed of. No other waste is to be disposed of in the cadaver waste bins (see below for the disposal of other waste).

6. Dissection tables should be kept clean and free of excessive tissue.

7. **The right of privacy and confidentiality due to all medical patients is extended to our anatomical donors at all times.**

8. Cadavers will be appropriately draped at all times. All regions not being studied should be draped. Entirely cover the cadaver when leaving it for any period of time.

9. Use of cameras, cell phones or other photographic or video equipment is not permitted in the laboratory at any time unless specifically authorized by the course administration.

10. Only students, faculty and other authorized personnel are allowed in the gross anatomy lab. Under no circumstances may a student bring an unauthorized visitor into the lab. Permission to bring a visitor into the lab can be granted but is restricted to healthcare professionals or individuals with an approved academic purpose.

11. **NOTHING leaves the lab without the permission of the facility administrator or the course director.**

12. Food and/or drinks are not allowed in the laboratory.

Security

1. Keep the doors of the laboratory closed **AT ALL TIMES**.

2. Do not share your bone box with anyone except your partners to prevent loss of bones.

Safety

The following safety procedures are in place to prevent injuries and limit exposure to chemicals:

1. Students must wear long pants and closed shoes whenever they are in the laboratory. Open-toed or perforated shoes (e.g., sandals), shorts and skirts are not to be worn in the anatomy lab. You will be asked to leave the laboratory if you are in violation of this dress code.

2. Students must wear a lab coat when in the lab. It is your responsibility to maintain your lab coat in a reasonably clean condition. The faculty will insist you wear your lab coat regardless of how dirty it is.

3. Gloves must be worn throughout the dissection period.

4. Eye protection must be worn whenever you are within five (5) feet of an open cadaver. Regular eyeglasses are sufficient eye protection. Students must wear safety goggles when using hammers, chisels, bone pliers and Stryker saws.

5. All used scalpel blades must be disposed of in the provided "sharps" containers. Never dispose of "sharps" in wastebaskets or garbage cans (see below for the disposal of other waste).

6. All injuries incurred in the gross anatomy laboratory, no matter how insignificant they may appear, must be reported immediately to an instructor. The instructor will administer first aid and determine whether the student should be directed to a facility for further treatment.

7. In case of an EMERGENCY, use the lab phone to call the police (9-911).

8. Students who are pregnant, or believe they may be pregnant, are responsible for discussing attendance in the gross anatomy lab with their physician.

Maintenance

1. The laboratory must be kept neat at all times and you are expected to clean your area after each day's dissection. This includes emptying the specimen tissue bucket at the end of your table and wiping up any large spills from the floor as needed. You are provided space for storing your atlases and dissection tools – please use it! Atlases and tools that are left on the counters will be placed in the lost and found box. Note that proper trash disposal is as follows:

cadaver (tissue) waste – cadaver waste container

gloves and cadaver-soaked paper towels, paper towels, paper, etc. – regular gray containers

blades – red sharps disposal boxes located on counter tops

Anatomy Laboratory Policy

I have read the rules and regulations of the gross anatomy laboratory and understand that any violation thereof is a breach of professional conduct.

_____

Printed Name

_____ _____

Signature Date

2.1.b. Scheduled Class Days and times:

Preface: Student and faculty exposure to hazardous chemicals will be limited to the times that the students or the faculty come into the lab and the duration in which they stay. This can indirectly be determined by their scheduled class days and times.

• ***Gross Anatomy Lab (PHT 5115 L)*** is scheduled for 3 hours a day for three days a week, (Tuesday and Thursday) every week within the fall schedule of 4 months not including holidays and breaks.

• ***Gross Anatomy Lab (OTH 5241 L)*** is scheduled for 3 hours a day for three days a week, (Monday, Wednesday, and Sunday) every week within the fall schedule of 4 months not including holidays and breaks.

• ***Neuroanatomy (PHT 5166)*** has a lab activity that will occur for one day per month for no more than 1 hour per class session during the spring semester.

• ***Neuroanatomy (OTH 5245)*** has a lab activity that will occur for one day for no more than 1 hour during the spring semester.

2.2. Student Responsibility before and after each Laboratory Session

2.2.a. Student Responsibility before each laboratory Session

• Students shall ensure that no food and open drink containers enter the lab or locker room

• First person in must make sure that all lights are turned on in the refrigeration unit, the teaching lab, the locker room, and the bathroom.

• Before entering the teaching lab, students shall ensure that they are appropriately dressed for the lab. This includes scrubs or a lab coat covering the clothing of the student prior to entering the teaching lab space.

• Student shall place all non-essential materials in the lockers prior to entering the teaching lab. This is to ensure that preservatives do not contaminate materials that may leave the class.

• During days of dissection students shall put on gloves immediately prior to removal of human specimens from the refrigeration unit. Additionally, students shall have their dissection kits and appropriate dissection tools prepared prior to the removal of the cadavers.

• Cadaver tables will be carefully removed and positioned into the teaching lab with an appropriate amount of space between cadaver tables so as to ensure no accidents or crowding occurs during the dissection. Furthermore, the tissue reservoir (specimen bucket) for the cadaver shall also be removed from the refrigeration unit and placed near the cadaver table.

2.2.b. Student Responsibility after each Laboratory Session

• Reposition cadaver onto dissection table so that the body and limbs can fit inside cadaver bag. Ensure that the body its associated parts are put back in a correct anatomical position. Clean dissection table and place any tissue removed from the cadaver in the appropriate receptacle (specimen tissue bucket). If skin has been removed from cadaver then spray the cadaver with Carosafe fluid to preserve specimen. Cover specimen with cadaver sheet and close the cadaver bag. Return cadaver table back into the refrigeration unit.

• Remove any dull blades from the scalpels used and clean all instruments that were used on the cadaver. Place any classroom tools back to their appropriate location.

• Clean the area where the dissection table was located, especially the counters and floor area to prevent accidents or accidental exposure to preservatives.

• Remove soiled gloves and dispose of them in the appropriate containers. Wash hands after removing gloves and before exiting the laboratory.

• Last person to leave laboratory shall ensure all doors are secured, the lights are turned off in the refrigeration unit, teaching lab, locker room, and the bathroom.

2.3. Cadaver Dissection Instructions

2.3.a. A high degree of precaution shall always be taken with any contaminated sharp items, including needles and scalpels.

2.3.b. Do not wave or point with scalpels or other sharp objects. Always keep scalpels in plain view.

2.3.c. If a blade becomes detached from the scalpel handle during a dissection, notify all members of dissection team immediately, stop and attempt to retrieve the blade using forceps. If this is unsuccessful, close the body bag / dissection table, alert faculty and place a warning notice on the specimen.

2.3.d. Never remove body tissues from the laboratory.

2.3.e. Never remove the State of Florida Anatomical Board ID tags from the specimen.

2.3.f. Place disposable materials in the appropriate containers.

2.3.g. All dissection procedures are to be performed carefully to minimize the creation of splashes or aerosols.

2.3.h. Broken glassware shall not be handled directly by hand, but shall be removed by mechanical means such as a brush and dustpan, tongs or forceps. Place in sharps waste containers for disposal.

2.3.i. Spills and accidents that result in overt exposures to infectious materials (body fluids) are to be reported immediately to the laboratory director.

2.3.j. All wastes are to be placed in the appropriate containers for proper disposal.

2.3.k. If mold is detected on the specimen, notify faculty, disinfect instruments and post a **DO NOT USE** sign on the closed body container until lab personnel can address the issue.

2.4. Other Uses for the Anatomical Labs

The Anatomical Board allows approved facilities the use of non-living animal material in the anatomical labs. However, living animals or materials that are from living organisms are not

approved to be stored or maintained in the depository. Furthermore, any samples stored in the FAMU depository are the responsibility of the Department or College requesting storage. Thus maintenance or upkeep of these material are not the responsibility of SOAHS.

3. Safety Precautions and Environment Protection Procedures.

Preface: Faculty, staff, students, and visitors upon entering the lab run the risk of injury or exposure to hazardous materials. To ensure that health and safety of any and all participants SOAHS, in following the Anatomical Board guidance on safety precautions and environmental protection, has assimilated a series of precautions that will assist in reducing risks as well as procedures that can be undertaken in case injury or accidental exposure to hazardous chemicals does occur. These procedures and precautions have been incorporated in the SOP and are shown below.

3.1. Universal Precautions

3.1.a. Attire: At a minimum, the following attire must be worn at all times while work is going on in the laboratory.

- Lab coats (three-quarter length) with long pants or Scrubs
- Disposable gloves
- Closed toed shoes (no sandals or open-toed shoes)
- Additional attire that may be used but not required includes barrier equipment such as safety glasses, masks, or face shields. These items can be worn by those who feel it necessary or when appropriate for use against anticipated splashes or splatters to the face.

3.1.b. Dealing with attire after lab use: Attire can be exposed to human specimen and preservative chemicals that may be biohazardous and should be dealt with appropriately.

• **Soiled lab coats:** These garments are not to be worn outside the laboratory area. Furthermore, all disposable protective clothing is disposed of within the laboratory; it shall never be taken home.

• **Used Gloves:** Disposable gloves shall be worn when handling potentially infectious materials, contaminated surfaces or equipment. Gloves shall be disposed of when overtly contaminated, when work with cadaveric materials is completed, or when the integrity of the glove is compromised. Disposable gloves are not to be washed, reused, or used for touching "clean" surfaces, and should not be worn outside the lab. Hands will be washed thoroughly with soap and water following removal of gloves.

3.1.c. Activities not permitted in the laboratory: eating, drinking, applying cosmetics including lip balm, handling contact lenses, gum chewing or smoking.

• Food or drink shall not be stored within the Teaching lab but can be housed in the locker room. Eating, drinking, or chewing gum is not allowed in any space including the locker room or bathroom.

• Students, faculty, and staff shall not wear contact lenses in the laboratory due to the potential hazards that can become entrapped under the contact or interact with the contact and affect the vision of the individual. These precautions shall be made clear prior to entrance to the lab.

• Cosmetics have been shown to adhere to preservatives used in the lab and thus students, faculty, and staff are encouraged not wear it while participating in dissection within the lab.

• Smoking is prohibited.

3.2. Injuries in the Laboratory:

3.2.a. If serious illness or injury occurs call 911. Give building and location where aid is needed, specific location within the building, type of problem, individual's condition, sequence of events, and medical history if known. Have somebody stay with the patient until

help arrives. Do not move the patient; keep the patient still and comfortable. Once help arrives, stay out of the way unless assistance is requested.

3.2.b. All injuries in the laboratory shall be reported immediately to the faculty, staff or lab directors. In all cases, a written report, documenting the injury shall be made to the University Environmental Health and Safety Department.

3.2.c. Laboratory protocol in the event of injuries is displayed in clear view on the east wall of the teaching lab near the emergency eye wash station.

3.3. Facility Emergency Exit Locations, Safety Signage positions, and Location of safety equipment: All signage in the laboratories, location of emergency equipment and procedures for fire or other emergency are listed below:

• **First aid kit** – Located in upper far right cabinet on the north wall nearest the emergency exit in the teaching lab.

• **Eye wash and emergency shower** – Located on the east wall closest to the sink in the south-east corner of the teaching lab.

• **Emergency Exit** – Located on the north-east corner and south-west corner of the teaching lab.

• **Fire Extinguisher** – Located on the east wall closest phone on the east wall and the emergency exit on the north-east corner of the teaching lab.

• **Telephone** – Located on the east wall on the bookcase between the emergency exit at the north-east corner and the fire-extinguisher on the east wall.

• **Fire instructions and Laboratory protocol in the event of injuries** - Posted on the east wall near the emergency eye wash and shower in the teaching lab.

3.4. Safety Data Sheet (SDS)

Preface: Faculty, staff, students, and visitors can be exposed to various levels of chemicals used within the lab. To ensure the health and safety associated with said chemicals an SDS for each potential hazardous chemical will be provided and kept to make everyone aware hazards and PPE Required. SDS sheets are incorporated in the SOP and shown below.

FLORIDA A&M UNIVERSITY

Department of Environmental Health and Safety

Working with Formaldehyde

Formaldehyde is well known as a preservative in research laboratories, as an embalming fluid, and as a sterilizer. Urea-formaldehyde (UF) and phenol formaldehyde (PF) resins are also used in foam insulations, as adhesives in the production of particle board and plywood, and in the treating of textiles.

Although the term formaldehyde describes various mixtures of formaldehyde, water, and alcohol, the term “formalin” is used to describe a saturated solution of formaldehyde dissolved in water with another agent, most commonly methanol which is added to stabilize the solution. Formalin is typically 37% formaldehyde by weight (40% by volume) and 6-13% methanol by volume in water. A typical laboratory formulation is called 10% buffered formalin solution. It contains about 3.7% formaldehyde, 1.5% methanol, 2 % buffers, and about 93% water. The formaldehyde component provides the disinfectant and preservative effects of formalin.

The *National Toxicological Program's (NTP) 12th Report on Carcinogens* classifies formaldehyde as "known to be a human carcinogen". It has been reported to cause nasal tumors. Formaldehyde is a sensitizing agent that can cause an immune system response upon initial exposure. Acute exposure is highly irritating to the eyes, nose, and throat and can make anyone exposed cough and wheeze. Subsequent exposure may cause severe allergic reactions of the skin, eyes and respiratory tract and can lead to olfactory fatigue, defined as the inability to discern the odor of formaldehyde. Ingestion of formaldehyde can be fatal, and long-term exposure to low levels in the air or on the skin can cause asthma-like respiratory problems and skin irritation such as dermatitis and itching. The National Institute for Occupational Safety and Health (NIOSH) considers 20 ppm of formaldehyde to be immediately dangerous to life and health (IDLH). When present in the air at a concentration above 0.1 part per million, formaldehyde can cause watery eyes, nausea, coughing, chest tightness, wheezing, skin rashes, allergenic reactions, and burning sensations in the eyes, nose, and throat. Exposure to airborne concentrations of formaldehyde must be limited to an average of 0.75 ppm over an 8-hour workday.

Safe Handling Procedures:

- All laboratories that work with formaldehyde must have a written Standard Operating Procedure (SOP).
- All work with formaldehyde should be conducted in a well ventilate space such as a fume hood or under a properly designed and installed exhaust system to prevent exposure by inhalation
- Splash goggles and impermeable gloves (nitrile, PVC, butyl rubber, Viton) should be worn to prevent eye and skin contact.
- Formaldehyde should be used only in areas free of ignition sources. Store formaldehyde in labeled, chemically compatible containers, away from heat and flame. Always place large-volume containers on a low, protected shelf or in another location where they will not be accidentally spilled or knocked over. Containers larger than 4L (1 gallon) should be stored inside a deep pan or other secondary containment. Do not store formaldehyde bottles in any area where a leak would flow to a drain.
- Containers of formaldehyde should be stored in secondary containers in areas separate from oxidizers and bases.
- An eyewash and safety shower shall be available if splashing of formaldehyde is likely.
- Be sure that formaldehyde solutions are clearly labeled with the chemical's name and hazards. As with any laboratory chemical, do not mouth pipette formaldehyde solutions. Do not eat, drink, or smoke where formaldehyde is handled, processed, or stored, since the chemical can be swallowed. Always wash hands thoroughly after using formaldehyde, even if gloves are worn.
- All procedures using formaldehyde are to be performed in designated areas. There is a space on the laboratory hazard communication door sign to designate the formaldehyde. All designated areas should be posted with a sign that contains the following information:

WARNING
DESIGNATED AREA FOR HANDLING THE FOLLOWING
SUBSTANCES WITH HIGH ACUTE OR CHRONIC TOXICITY:
Formaldehyde – Carcinogen
AUTHORIZED PERSONNEL ONLY

Emergency Procedures:

Formaldehyde Spills

If formaldehyde is spilled outside a chemical fume hood, evacuate the area, close the laboratory doors, and post the area to prevent others from entering. If the incident occurs during regular work hours (Monday to Friday, 8 a.m. to 5 p.m.), call EH&S (599-3442 or 3443) for assistance in cleaning up the spill. After hours, call FAMUPD (599-3256); they will contact EH&S responders. Provide information or other assistance to emergency responders as requested.

Inhalation of Formaldehyde Vapor

If someone inhales a high concentration of formaldehyde vapor, immediately move the person to fresh air and call Student Health Services (599-3777). When Student Health Services is closed, go to emergency room

at Tallahassee Memorial or Capital Regional Medical Center. If the person is having trouble breathing, call 911 for immediate medical attention.

Splash of Formaldehyde to Eyes or Skin

For eye or skin exposure, immediately flush with plenty of water for at least 15 minutes. Remove contaminated clothing and contact Student Health Services. In case of ingestion, call 911 for immediate medical attention. As with all accidents, report any exposure as soon as possible to your supervisor.

Exposure Limits

The Permissible Exposure Limit (PEL) for formaldehyde in the workplace is 0.75 parts per million (PPM) of air measured as an 8-hour time-weighted average (TWA). The standard includes a second PEL in the form of a short-term exposure limit (STEL) of 2 ppm which is the maximum exposure allowed during a 15-minute period.

3.4.a. Formaldehyde

ThermoFisher SCIENTIFIC

SAFETY DATA SHEET

Creation Date 08-Feb-2010 **Revision Date** 17-Jan-2018 **Revision Number** 4

1. Identification

Product Name **Formaldehyde solution 37%**

Cat No. : **F75F-1GAL; F75P-1GAL; F75P-4; F75P-20**

Synonyms Formalin; Methanal; Methylene oxide; Oxymethane; Formic aldehyde; Methyl aldehyde

Recommended Use Laboratory chemicals.
Uses advised against Not for food, drug, pesticide or biocidal product use

Details of the supplier of the safety data sheet

Company
Fisher Scientific
One Reagent Lane
Fair Lawn, NJ 07410
Tel: (201) 796-7100

Emergency Telephone Number
CHEMTREC®, Inside the USA: 800-424-9300
CHEMTREC®, Outside the USA: 001-703-527-3887

2. Hazard(s) identification

Classification
This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Flammable liquids	Category 3
Acute oral toxicity	Category 3
Acute dermal toxicity	Category 3
Acute Inhalation Toxicity - Vapors	Category 3
Skin Corrosion/irritation	Category 1 B
Serious Eye Damage/Eye Irritation	Category 1
Skin Sensitization	Category 1
Germ Cell Mutagenicity	Category 2
Carcinogenicity	Category 1A
Specific target organ toxicity (single exposure)	Category 1
Target Organs - Respiratory system, Central nervous system (CNS), Optic nerve.	
Specific target organ toxicity - (repeated exposure)	Category 1
Target Organs - Kidney, Liver, Heart, spleen, Blood.	

Label Elements

Signal Word
Danger

Hazard Statements
Flammable liquid and vapor
Toxic if swallowed
Toxic in contact with skin

Causes severe skin burns and eye damage
May cause an allergic skin reaction
Toxic if inhaled
May cause respiratory irritation
May cause drowsiness or dizziness
Suspected of causing genetic defects
May cause cancer
Causes damage to organs
Causes damage to organs through prolonged or repeated exposure

Precautionary Statements
Prevention
Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Use personal protective equipment as required
Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Use only outdoors or in a well-ventilated area
Do not breathe dust/fume/gas/mist/vapors/spray
Contaminated work clothing should not be allowed out of the workplace
Wear protective gloves
Keep away from heat/sparks/open flames/hot surfaces. - No smoking
Keep container tightly closed
Ground/bond container and receiving equipment
Use explosion-proof electrical/ventilating/lighting/equipment
Use only non-sparking tools
Take precautionary measures against static discharge
Keep cool
Response
Immediately call a POISON CENTER or doctor/physician
Inhalation
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
Skin
Wash contaminated clothing before reuse
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower
If skin irritation or rash occurs: Get medical advice/attention
Eyes
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
Ingestion
Rinse mouth
Do NOT induce vomiting
Fire
In case of fire: Use CO2, dry chemical, or foam for extinction
Storage
Store locked up
Store in a well-ventilated place. Keep container tightly closed
Disposal
Dispose of contents/container to an approved waste disposal plant
Hazards not otherwise classified (HNOC)
None identified
Other hazards
Poison, may be fatal or cause blindness if swallowed. Vapor harmful. Cannot be made non-poisonous.

WARNING. Reproductive Harm - https://www.p65warnings.ca.gov/.

3. Composition/Information on Ingredients

Component	CAS-No	Weight %
Water	7732-18-5	45 - 48
Formaldehyde	50-00-0	37 - 40
Methyl alcohol	67-56-1	15

4. First-aid measures

General Advice Immediate medical attention is required. Show this safety data sheet to the doctor in attendance.

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Skin Contact Wash off immediately with plenty of water for at least 15 minutes. Immediate medical attention is required.

Inhalation If breathing is difficult, give oxygen. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Move to fresh air. Immediate medical attention is required.

Ingestion Do not induce vomiting. Call a physician or Poison Control Center immediately.

Most important symptoms and effects Breathing difficulties. Causes burns by all exposure routes. May cause allergic skin reaction. . Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting: Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation: Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain or flushing

Notes to Physician Treat symptomatically

5. Fire-fighting measures

Suitable Extinguishing Media Cool closed containers exposed to fire with water spray.

Unsuitable Extinguishing Media No information available

Flash Point 50 °C / 122 °F

Method - No information available

Autoignition Temperature No information available

Explosion Limits

Upper No data available

Lower No data available

Sensitivity to Mechanical Impact No information available

Sensitivity to Static Discharge No information available

Specific Hazards Arising from the Chemical

Flammable. Containers may explode when heated. Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back. The product causes burns of eyes, skin and mucous membranes. Thermal decomposition can lead to

release of irritating gases and vapors.

Hazardous Combustion Products
Hydrogen Formaldehyde
Protective Equipment and Precautions for Firefighters
Thermal decomposition can lead to release of irritating gases and vapors. As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

NFPA

Health	Flammability	Instability	Physical hazards
3	2	0	N/A

6. Accidental release measures

Personal Precautions Use personal protective equipment. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Ensure adequate ventilation. Remove all sources of ignition. Take precautionary measures against static discharges.

Environmental Precautions Should not be released into the environment. Do not flush into surface water or sanitary sewer system. See Section 12 for additional ecological information.

Methods for Containment and Clean Up Soak up with inert absorbent material. Keep in suitable, closed containers for disposal. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment.

7. Handling and storage

Handling Use only under a chemical fume hood. Do not breathe vapors or spray mist. Do not get in eyes, on skin, or on clothing. Wear personal protective equipment. Do not ingest. Keep away from open flames, hot surfaces and sources of ignition. Use only non-sparking tools. Take precautionary measures against static discharges.

Storage Keep containers tightly closed in a dry, cool and well-ventilated place. Corrosives area. Keep away from heat and sources of ignition.

8. Exposure controls / personal protection

Exposure Guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH	Mexico OEL (TWA)
Formaldehyde	TWA: 0.1 ppm STEL: 0.3 ppm	(Vacated) TWA: 3 ppm (Vacated) STEL: 10 ppm (Vacated) Ceiling: 5 ppm TWA: 0.75 ppm STEL: 2 ppm	IDLH: 20 ppm TWA: 0.016 ppm Ceiling: 0.1 ppm	Ceiling: 2 ppm Ceiling: 3 mg/m³
Methyl alcohol	TWA: 200 ppm STEL: 250 ppm Skin	(Vacated) TWA: 200 ppm (Vacated) TWA: 260 mg/m³ (Vacated) STEL: 250 ppm (Vacated) STEL: 325 mg/m³ Skin TWA: 200 ppm TWA: 260 mg/m³	IDLH: 6000 ppm TWA: 200 ppm TWA: 260 mg/m³ STEL: 250 ppm STEL: 325 mg/m³	TWA: 200 ppm TWA: 260 mg/m³ STEL: 250 ppm STEL: 310 mg/m³

Legend

ACGIH *- American Conference of Governmental Industrial Hygienists*
OSHA *- Occupational Safety and Health Administration*
NIOSH IDLH: *The National Institute for Occupational Safety and Health Immediately Dangerous to Life or Health*

Engineering Measures Use only under a chemical fume hood. Ensure that eyewash stations and safety showers are close to the workstation location. Use explosion-proof electrical/ventilating/lighting/equipment. Ensure adequate ventilation, especially in confined areas.

Personal Protective Equipment

Eye/face Protection	Tightly fitting safety goggles. Face-shield.
Skin and body protection	Wear appropriate protective gloves and clothing to prevent skin exposure.
Respiratory Protection	Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.
Hygiene Measures	Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Physical State	Liquid
Appearance	Colorless
Odor	pungent
Odor Threshold	No information available
pH	No information available
Melting Point/Range	0 °C / 32 °F
Boiling Point/Range	101 °C / 213.8 °F
Flash Point	50 °C / 122 °F
Evaporation Rate	No information available
Flammability (solid,gas)	Not applicable
Flammability or explosive limits	
Upper	No data available
Lower	No data available
Vapor Pressure	No information available
Vapor Density	> 1.0
Specific Gravity	No information available
Solubility	miscible
Partition coefficient; n-octanol/water	No data available
Autoignition Temperature	No information available
Decomposition Temperature	No information available
Viscosity	No information available

10. Stability and reactivity

Reactive Hazard	None known, based on information available
Stability	Stable under normal conditions.
Conditions to Avoid	Incompatible products. Excess heat. Keep away from open flames, hot surfaces and sources of ignition.
Incompatible Materials	Strong oxidizing agents, Strong bases, nitriles, Acids, Isocyanates, Acid anhydrides, Metals, Acid chlorides
Hazardous Decomposition Products	Hydrogen, Formaldehyde
Hazardous Polymerization	Hazardous polymerization does not occur.
Hazardous Reactions	None under normal processing.

11. Toxicological information

Acute Toxicity

Product Information	
Oral LD50	Category 3. ATE = 50 - 300 mg/kg.
Dermal LD50	Category 3. ATE = 200 - 1000 mg/kg.

Vapor LC50 Category 3. ATE = 2 - 10 mg/l.

Component Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Water	-	Not listed	Not listed
Formaldehyde	500 mg/kg (Rat)	LD50 = 270 mg/kg (Rabbit)	0.578 mg/L (Rat) 4 h
Methyl alcohol	**Calc. ATE 60 mg/kg** LD50 > 1187 – 2769 mg/kg (Rat)	**Calc. ATE 60 mg/kg** LD50 = 17100 mg/kg (Rabbit)	**Calc. ATE 0.6 mg/L (vapours) or 0.5 mg/L (mists)** LC50 = 128.2 mg/L (Rat) 4 h

Toxicologically Synergistic Products No information available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Irritation Causes burns by all exposure routes

Sensitization No information available

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	CAS-No	IARC	NTP	ACGIH	OSHA	Mexico
Water	7732-18-5	Not listed	Not listed	Not listed	Not listed	Not listed
Formaldehyde	50-00-0	Group 1	Known	A1	X	A2
Methyl alcohol	67-56-1	Not listed	Not listed	Not listed	Not listed	Not listed

IARC: (International Agency for Research on Cancer)

IARC: (International Agency for Research on Cancer)
Group 1 - Carcinogenic to Humans
Group 2A - Probably Carcinogenic to Humans
Group 2B - Possibly Carcinogenic to Humans

NTP: (National Toxicity Program)

NTP: (National Toxicity Program)
Known - Known Carcinogen
Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen

ACGIH: (American Conference of Governmental Industrial Hygienists)

A1 - Known Human Carcinogen
A2 - Suspected Human Carcinogen
A3 - Animal Carcinogen
ACGIH: (American Conference of Governmental Industrial Hygienists)

Mexico - Occupational Exposure Limits - Carcinogens

Mexico - Occupational Exposure Limits - Carcinogens
A1 - Confirmed Human Carcinogen
A2 - Suspected Human Carcinogen
A3 - Confirmed Animal Carcinogen
A4 - Not Classifiable as a Human Carcinogen
A5 - Not Suspected as a Human Carcinogen

Mutagenic Effects Mutagenic effects have occurred in humans.

Reproductive Effects Experiments have shown reproductive toxicity effects on laboratory animals.

Developmental Effects Developmental effects have occurred in experimental animals. Component substance is listed on California Proposition 65 as a developmental hazard.

Teratogenicity Teratogenic effects have occurred in experimental animals.

STOT - single exposure Respiratory system Central nervous system (CNS) Optic nerve
STOT - repeated exposure Kidney Liver Heart spleen Blood

Aspiration hazard No information available

Symptoms / effects,both acute and delayed Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting: Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation: Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain or flushing

Endocrine Disruptor Information No information available

Other Adverse Effects Tumorigenic effects have been reported in experimental animals. See actual entry in RTECS for complete information.

12. Ecological information

Ecotoxicity

Do not empty into drains. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. The product contains following substances which are hazardous for the environment. Contains a substance which is:. Toxic to aquatic organisms.

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Formaldehyde	Not listed	Leuciscus idus: LC50 = 15 mg/L 96h	Not listed	EC50 = 20 mg/L 96h EC50 = 2 mg/L 48h
Methyl alcohol	Not listed	Pimephales promelas: LC50 > 10000 mg/L 96h	EC50 = 39000 mg/L 25 min EC50 = 40000 mg/L 15 min EC50 = 43000 mg/L 5 min	EC50 > 10000 mg/L 24h

Persistence and Degradability Miscible with water Persistence is unlikely based on information available.

Bioaccumulation/ Accumulation No information available.

Mobility . Will likely be mobile in the environment due to its water solubility.

Component	log Pow
Formaldehyde	-0.35
Methyl alcohol	-0.74

13. Disposal considerations

Waste Disposal Methods Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

Component	RCRA - U Series Wastes	RCRA - P Series Wastes
Formaldehyde - 50-00-0	U122	-
Methyl alcohol - 67-56-1	U154	-

14. Transport information

DOT

UN-No	UN1198
Proper Shipping Name	FORMALDEHYDE SOLUTIONS, FLAMMABLE
Hazard Class	3
Subsidiary Hazard Class	8
Packing Group	III

TDG

UN-No	UN1198
Proper Shipping Name	FORMALDEHYDE SOLUTION, FLAMMABLE
Hazard Class	3
Subsidiary Hazard Class	8
Packing Group	III

IATA

UN-No	UN1198
Proper Shipping Name	FORMALDEHYDE SOLUTION, FLAMMABLE
Hazard Class	3
Subsidiary Hazard Class	8
Packing Group	III

IMDG/IMO

UN-No	UN1198
Proper Shipping Name	FORMALDEHYDE SOLUTION, FLAMMABLE
Hazard Class	3
Subsidiary Hazard Class	8

Packing Group III

15. Regulatory information

All of the components in the product are on the following Inventory lists: X = listed

International Inventories

Component	TSCA	DSL	NDSL	EINECS	ELINCS	NLP	PICCS	ENCS	AICS	IECSC	KECL
Water	X	X	-	231-791-2	-		X	-	X	X	X
Formaldehyde	X	X	-	200-001-8	-		X	X	X	X	X
Methyl alcohol	X	X	-	200-659-6	-		X	X	X	X	X

Legend:
X - Listed
E - Indicates a substance that is the subject of a Section 5(e) Consent order under TSCA.
F - Indicates a substance that is the subject of a Section 5(f) Rule under TSCA.
N - Indicates a polymeric substance containing no free-radical initiator in its inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used.
P - Indicates a commenced PMN substance
R - Indicates a substance that is the subject of a Section 6 risk management rule under TSCA.
S - Indicates a substance that is identified in a proposed or final Significant New Use Rule
T - Indicates a substance that is the subject of a Section 4 test rule under TSCA.
XU - Indicates a substance exempt from reporting under the Inventory Update Rule, i.e. Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(B).
Y1 - Indicates an exempt polymer that has a number-average molecular weight of 1,000 or greater.
Y2 - Indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.

U.S. Federal Regulations

TSCA 12(b) Not applicable

SARA 313

Component	CAS-No	Weight %	SARA 313 - Threshold Values %
Formaldehyde	50-00-0	37 - 40	0.1
Methyl alcohol	67-56-1	15	1.0

SARA 311/312 Hazard Categories See section 2 for more information

CWA (Clean Water Act)

Component	CWA - Hazardous Substances	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants
Formaldehyde	X	100 lb	-	-

Clean Air Act

Component	HAPS Data	Class 1 Ozone Depletors	Class 2 Ozone Depletors
Formaldehyde	X		-
Methyl alcohol	X		-

OSHA Occupational Safety and Health Administration

Component	Specifically Regulated Chemicals	Highly Hazardous Chemicals
Formaldehyde	2 ppm STEL 0.5 ppm Action Level 0.75 ppm TWA	TQ: 1000 lb

CERCLA This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Component	Hazardous Substances RQs	CERCLA EHS RQs

Formaldehyde	100 lb	100 lb
Methyl alcohol	5000 lb	-

California Proposition 65 This product contains the following proposition 65 chemicals

Component	CAS-No	California Prop. 65	Prop 65 NSRL	Category
Formaldehyde	50-00-0	Carc. (Gaseous only)	40 µg/day	Carcinogen
Methyl alcohol	67-56-1	Developmental	-	Developmental

U.S. State Right-to-Know Regulations

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Water	-	-	X	-	-
Formaldehyde	X	X	X	X	X
Methyl alcohol	X	X	X	X	X

U.S. Department of Transportation

Reportable Quantity (RQ): Y
DOT Marine Pollutant N
DOT Severe Marine Pollutant N

U.S. Department of Homeland Security
This product contains the following DHS chemicals:

Component	DHS Chemical Facility Anti-Terrorism Standard
Formaldehyde	11250 lb STQ (solution)

Other International Regulations

Mexico - Grade Moderate risk, Grade 2

16. Other information

Prepared By
Regulatory Affairs
Thermo Fisher Scientific
Email: EMSDS.RA@thermofisher.com

Creation Date 08-Feb-2010
Revision Date 17-Jan-2018
Print Date 17-Jan-2018
Revision Summary This document has been updated to comply with the US OSHA HazCom 2012 Standard replacing the current legislation under 29 CFR 1910.1200 to align with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

Disclaimer
The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

End of SDS

3.4.b. Formalin

SAFETY DATA SHEET

Creation Date 12-May-2011 **Revision Date** 13-Apr-2018 **Revision Number** 1

1. Identification

Product Name **Formalin, Buffered, 10% (Phosphate Buffer/Certified)**

Cat No. : **SF100-4, SF100-20, SF100-200**

Synonyms No information available

Recommended Use Laboratory chemicals.
Uses advised against Food, drug, pesticide or biocidal product use

Details of the supplier of the safety data sheet

Company
Fisher Scientific
One Reagent Lane
Fair Lawn, NJ 07410
Tel: (201) 796-7100

Emergency Telephone Number
CHEMTREC®, Inside the USA: 800-424-9300
CHEMTREC®, Outside the USA: 001-703-527-3887

2. Hazard(s) identification

Classification
This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Flammable liquids	Category 4
Skin Corrosion/irritation	Category 2
Serious Eye Damage/Eye Irritation	Category 1
Skin Sensitization	Category 1
Germ Cell Mutagenicity	Category 2
Carcinogenicity	Category 1A
Specific target organ toxicity (single exposure)	Category 1

Target Organs - Respiratory system, Central nervous system (CNS).

Label Elements

Signal Word
Danger

Hazard Statements
Combustible liquid
Causes skin irritation
May cause an allergic skin reaction
Causes serious eye damage
Suspected of causing genetic defects
May cause cancer
Causes damage to organs

Precautionary Statements
Prevention
Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Use personal protective equipment as required
Wash face, hands and any exposed skin thoroughly after handling
Contaminated work clothing should not be allowed out of the workplace
Wear protective gloves
Do not breathe dust/fume/gas/mist/vapors/spray
Do not eat, drink or smoke when using this product
Keep away from heat/sparks/open flames/hot surfaces. - No smoking
Response
IF exposed: Call a POISON CENTER or doctor/physician
Skin
IF ON SKIN: Wash with plenty of soap and water
Take off contaminated clothing and wash before reuse
If skin irritation or rash occurs: Get medical advice/attention
Eyes
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
Immediately call a POISON CENTER or doctor/physician
Fire
In case of fire: Use CO2, dry chemical, or foam for extinction
Storage
Store locked up
Store in a well-ventilated place. Keep cool
Disposal
Dispose of contents/container to an approved waste disposal plant
Hazards not otherwise classified (HNOC)
None identified
WARNING. Reproductive Harm - https://www.p65warnings.ca.gov/.

3. Composition/Information on Ingredients

Component	CAS-No	Weight %
Water	7732-18-5	92-94
Formaldehyde	50-00-0	4.0
Methyl alcohol	67-56-1	1.0 - 2.0
Sodium phosphate dibasic	7558-79-4	0.7
Phosphoric acid, monosodium salt, monohydrate	10049-21-5	0.4

4. First-aid measures

General Advice Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Immediate medical attention is required.

Skin Contact Wash off immediately with plenty of water for at least 15 minutes. Obtain medical attention.

Inhalation	Move to fresh air. If breathing is difficult, give oxygen. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Immediate medical attention is required.
Ingestion	Do not induce vomiting. Call a physician or Poison Control Center immediately.
Most important symptoms and effects	May cause allergic skin reaction. Breathing difficulties. . Causes eye burns. Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain or flushing: Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting
Notes to Physician	Treat symptomatically

5. Fire-fighting measures

Suitable Extinguishing Media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Cool closed containers exposed to fire with water spray.
Unsuitable Extinguishing Media	No information available
Flash Point	81 °C / 177.8 °F
Method -	No information available
Autoignition Temperature	No information available
Explosion Limits	
Upper	No data available
Lower	No data available
Sensitivity to Mechanical Impact	No information available
Sensitivity to Static Discharge	No information available

Specific Hazards Arising from the Chemical
Combustible material. Risk of ignition. Containers may explode when heated. Thermal decomposition can lead to release of irritating gases and vapors. Keep product and empty container away from heat and sources of ignition.

Hazardous Combustion Products
Carbon monoxide (CO) Carbon dioxide (CO_2)
Protective Equipment and Precautions for Firefighters
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

NFPA

Health	Flammability	Instability	Physical hazards
2	2	0	N/A

6. Accidental release measures

Personal Precautions	Use personal protective equipment. Evacuate personnel to safe areas. Remove all sources of ignition. Take precautionary measures against static discharges. Ensure adequate ventilation. Do not get in eyes, on skin, or on clothing.
Environmental Precautions	Should not be released into the environment. See Section 12 for additional ecological information.
Methods for Containment and Clean Up	Remove all sources of ignition. Soak up with inert absorbent material. Keep in suitable, closed containers for disposal.

7. Handling and storage

Handling	Use only under a chemical fume hood. Wear personal protective equipment. Do not get in eyes, on skin, or on clothing. Do not breathe vapors or spray mist. Do not ingest. Keep away from open flames, hot surfaces and sources of ignition.

Storage Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat and sources of ignition.

8. Exposure controls / personal protection

Exposure Guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH	Mexico OEL (TWA)
Formaldehyde	TWA: 0.1 ppm STEL: 0.3 ppm	(Vacated) TWA: 3 ppm (Vacated) STEL: 10 ppm (Vacated) Ceiling: 5 ppm TWA: 0.75 ppm STEL: 2 ppm	IDLH: 20 ppm TWA: 0.016 ppm Ceiling: 0.1 ppm	Ceiling: 2 ppm Ceiling: 3 mg/m³
Methyl alcohol	TWA: 200 ppm STEL: 250 ppm Skin	(Vacated) TWA: 200 ppm (Vacated) TWA: 260 mg/m³ (Vacated) STEL: 250 ppm (Vacated) STEL: 325 mg/m³ Skin TWA: 200 ppm TWA: 260 mg/m³	IDLH: 6000 ppm TWA: 200 ppm TWA: 260 mg/m³ STEL: 250 ppm STEL: 325 mg/m³	TWA: 200 ppm TWA: 260 mg/m³ STEL: 250 ppm STEL: 310 mg/m³

Legend

ACGIH *- American Conference of Governmental Industrial Hygienists*
OSHA *- Occupational Safety and Health Administration*
NIOSH IDLH: *The National Institute for Occupational Safety and Health Immediately Dangerous to Life or Health*

Engineering Measures Use only under a chemical fume hood. Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location.

Personal Protective Equipment

Eye/face Protection Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin and body protection Wear appropriate protective gloves and clothing to prevent skin exposure.

Respiratory Protection Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Physical State	Liquid
Appearance	Clear
Odor	pungent
Odor Threshold	No information available
pH	6.9 - 7.1
Melting Point/Range	0 °C / 32 °F
Boiling Point/Range	93.9 - 100 °C / 201 - 212 °F
Flash Point	81 °C / 177.8 °F
Evaporation Rate	> 1.0
Flammability (solid,gas)	Not applicable
Flammability or explosive limits	
Upper	No data available
Lower	No data available

Vapor Pressure	No information available
Vapor Density	1.0
Specific Gravity	1.10
Solubility	miscible
Partition coefficient; n-octanol/water	No data available
Autoignition Temperature	No information available
Decomposition Temperature	No information available
Viscosity	No information available

10. Stability and reactivity

Reactive Hazard None known, based on information available

Stability Stable under normal conditions.

Conditions to Avoid Incompatible products. Excess heat. Keep away from open flames, hot surfaces and sources of ignition.

Incompatible Materials Strong oxidizing agents

Hazardous Decomposition Products Carbon monoxide (CO), Carbon dioxide (CO_2)

Hazardous Polymerization Hazardous polymerization does not occur.

Hazardous Reactions None under normal processing.

11. Toxicological information

Acute Toxicity

Product Information

Oral LD50 Based on ATE data, the classification criteria are not met. ATE > 2000 mg/kg.

Dermal LD50 Based on ATE data, the classification criteria are not met. ATE > 2000 mg/kg.

Vapor LC50 Based on ATE data, the classification criteria are not met. ATE > 20 mg/l.

Component Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Water	-	Not listed	Not listed
Formaldehyde	500 mg/kg (Rat)	LD50 = 270 mg/kg (Rabbit)	0.578 mg/L (Rat) 4 h
Methyl alcohol	**Calc. ATE 60 mg/kg** LD50 > 1187 – 2769 mg/kg (Rat)	**Calc. ATE 60 mg/kg** LD50 = 17100 mg/kg (Rabbit)	**Calc. ATE 0.6 mg/L (vapours) or 0.5 mg/L (mists)** LC50 = 128.2 mg/L (Rat) 4 h
Sodium phosphate dibasic	LD50 = 17 g/kg (Rat)	Not listed	Not listed

Toxicologically Synergistic Products No information available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Irritation Severe eye irritant; Irritating to skin

Sensitization May cause sensitization by skin contact

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	CAS-No	IARC	NTP	ACGIH	OSHA	Mexico
Water	7732-18-5	Not listed	Not listed	Not listed	Not listed	Not listed
Formaldehyde	50-00-0	Group 1	Known	A1	X	A2
Methyl alcohol	67-56-1	Not listed	Not listed	Not listed	Not listed	Not listed
Sodium phosphate dibasic	7558-79-4	Not listed	Not listed	Not listed	Not listed	Not listed
Phosphoric acid,	10049-21-5	Not listed	Not listed	Not listed	Not listed	Not listed

monosodium salt, monohydrate						

IARC: (International Agency for Research on Cancer)

NTP: (National Toxicity Program)

ACGIH: (American Conference of Governmental Industrial Hygienists)

Mexico - Occupational Exposure Limits - Carcinogens

IARC: (International Agency for Research on Cancer)
Group 1 - Carcinogenic to Humans
Group 2A - Probably Carcinogenic to Humans
Group 2B - Possibly Carcinogenic to Humans
NTP: (National Toxicity Program)
Known - Known Carcinogen
Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen
A1 - Known Human Carcinogen
A2 - Suspected Human Carcinogen
A3 - Animal Carcinogen
ACGIH: (American Conference of Governmental Industrial Hygienists)
Mexico - Occupational Exposure Limits - Carcinogens
A1 - Confirmed Human Carcinogen
A2 - Suspected Human Carcinogen
A3 - Confirmed Animal Carcinogen
A4 - Not Classifiable as a Human Carcinogen
A5 - Not Suspected as a Human Carcinogen

Mutagenic Effects No information available

Reproductive Effects No information available.

Developmental Effects No information available.

Teratogenicity No information available.

STOT - single exposure Respiratory system Central nervous system (CNS)

STOT - repeated exposure None known

Aspiration hazard No information available

Symptoms / effects,both acute and delayed Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain or flushing: Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting

Endocrine Disruptor Information No information available

Other Adverse Effects The toxicological properties have not been fully investigated.

12. Ecological information

Ecotoxicity

The product contains following substances which are hazardous for the environment.

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Formaldehyde	Not listed	Leuciscus idus: LC50 = 15 mg/L 96h	Not listed	EC50 = 20 mg/L 96h EC50 = 2 mg/L 48h
Methyl alcohol	Not listed	Pimephales promelas: LC50 > 10000 mg/L 96h	EC50 = 39000 mg/L 25 min EC50 = 40000 mg/L 15 min EC50 = 43000 mg/L 5 min	EC50 > 10000 mg/L 24h

Persistence and Degradability Miscible with water Persistence is unlikely based on information available.

Bioaccumulation/ Accumulation No information available.

Mobility . Will likely be mobile in the environment due to its water solubility.

Component	log Pow
Formaldehyde	-0.35
Methyl alcohol	-0.74

13. Disposal considerations

Waste Disposal Methods Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

Component	RCRA - U Series Wastes	RCRA - P Series Wastes
Formaldehyde - 50-00-0	U122	-
Methyl alcohol - 67-56-1	U154	-

14. Transport information

DOT Not regulated
TDG Not regulated
IATA Not regulated
IMDG/IMO Not regulated

15. Regulatory information

All of the components in the product are on the following Inventory lists: The product is classified and labeled according to EC directives or corresponding national laws The product is classified and labeled in accordance with Directive 1999/45/EC See Componets SDS's China X = listed Australia U.S.A. (TSCA) Canada (DSL/NDSL) Europe (EINECS/ELINCS/NLP) Australia (AICS) Korea (ECL) China (IECSC) Japan (ENCS) Philippines (PICCS) Philippines Complete Regulatory Information contained in following SDS's

International Inventories

Component	TSCA	DSL	NDSL	EINECS	ELINCS	NLP	PICCS	ENCS	AICS	IECSC	KECL
Water	X	X	-	231-791-2	-		X	-	X	X	X
Formaldehyde	X	X	-	200-001-8	-		X	X	X	X	X
Methyl alcohol	X	X	-	200-659-6	-		X	X	X	X	X
Sodium phosphate dibasic	X	X	-	231-448-7	-		X	X	X	X	X
Phosphoric acid, monosodium salt, monohydrate	-	-	-	-	-		X	-	X	X	-

Legend:
X - Listed
E - Indicates a substance that is the subject of a Section 5(e) Consent order under TSCA.
F - Indicates a substance that is the subject of a Section 5(f) Rule under TSCA.
N - Indicates a polymeric substance containing no free-radical initiator in its inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used.
P - Indicates a commenced PMN substance
R - Indicates a substance that is the subject of a Section 6 risk management rule under TSCA.
S - Indicates a substance that is identified in a proposed or final Significant New Use Rule
T - Indicates a substance that is the subject of a Section 4 test rule under TSCA.
XU - Indicates a substance exempt from reporting under the Inventory Update Rule, i.e. Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(B).
Y1 - Indicates an exempt polymer that has a number-average molecular weight of 1,000 or greater.
Y2 - Indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.

U.S. Federal Regulations

TSCA 12(b) Not applicable

SARA 313

Component	CAS-No	Weight %	SARA 313 - Threshold Values %
Formaldehyde	50-00-0	4.0	0.1
Methyl alcohol	67-56-1	1.0 - 2.0	1.0

SARA 311/312 Hazard Categories See section 2 for more information

CWA (Clean Water Act)

Component	CWA - Hazardous Substances	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants
Formaldehyde	X	100 lb	-	-
Sodium phosphate dibasic	X	5000 lb	-	-

Clean Air Act

Component	HAPS Data	Class 1 Ozone Depletors	Class 2 Ozone Depletors
Formaldehyde	X		-
Methyl alcohol	X		-

OSHA Occupational Safety and Health Administration

Component	Specifically Regulated Chemicals	Highly Hazardous Chemicals
Formaldehyde	2 ppm STEL 0.5 ppm Action Level 0.75 ppm TWA	TQ: 1000 lb

CERCLA This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Component	Hazardous Substances RQs	CERCLA EHS RQs
Formaldehyde	100 lb	100 lb
Methyl alcohol	5000 lb	-
Sodium phosphate dibasic	5000 lb	-

California Proposition 65 This product contains the following proposition 65 chemicals

Component	CAS-No	California Prop. 65	Prop 65 NSRL	Category
Formaldehyde	50-00-0	Carc. (Gaseous only)	40 µg/day	Carcinogen
Methyl alcohol	67-56-1	Developmental	-	Developmental

U.S. State Right-to-Know Regulations

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Water	-	-	X	-	-
Formaldehyde	X	X	X	X	X
Methyl alcohol	X	X	X	X	X
Sodium phosphate dibasic	X	X	X	-	-

U.S. Department of Transportation

Reportable Quantity (RQ): Y
DOT Marine Pollutant N
DOT Severe Marine Pollutant N

U.S. Department of Homeland Security
This product contains the following DHS chemicals:

Component	DHS Chemical Facility Anti-Terrorism Standard
Formaldehyde	11250 lb STQ (solution)

Other International Regulations

Mexico - Grade Moderate risk, Grade 2

16. Other information

Prepared By
Regulatory Affairs
Thermo Fisher Scientific
Email: EMSDS.RA@thermofisher.com

Creation Date	12-May-2011
Revision Date	13-Apr-2018
Print Date	13-Apr-2018
Revision Summary	This document has been updated to comply with the US OSHA HazCom 2012 Standard replacing the current legislation under 29 CFR 1910.1200 to align with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

End of SDS

3.4.c. Carosafe

Safety Data Sheet

Carosafe®

CARIDLINA®

www.carolina.com

Section 1 Product Description

Product Name:	Carosafe®
Recommended Use:	Science education applications
Synonyms:	None
Distributor:	Carolina Biological Supply Company 2700 York Road, Burlington, NC 27215 1-800-227-1150
Chemical Information:	800-227-1150 (8am-5pm (ET) M-F)
Chemtrec:	800-424-9300 (Transportation Spill Response 24 hours)

Section 2 Hazard Identification

Classification of the chemical in accordance with paragraph (d) of §1910.1200;

WARNING

Harmful if swallowed.

GHS Classification:
Acute Toxicity - Oral Category 4

Other Safety Precautions:

May cause eye irritation.
May cause gastrointestinal discomfort.
May cause irritation to respiratory tract.
May cause irritation to skin.

Section 3 Composition/ Information on Ingredients

Chemical Name		.%...
Water	7732-18-5	89
Propylene Glycol	57-55-6	10.01
2-Amino-2-Ethyl-1,3-Propanediol	115-70-8	0.66
2-Phenoxyethanol	122-99-6	0.33

Section 4 First Aid Measures

Emergency and First Aid Procedures

Inhalation:	In case of accident by inhalation: remove casualty to fresh air and keep at rest.
Eyes:	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
Skin Contact:	After contact with skin, wash immediately with plenty of water.
Ingestion:	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

Section 5 Firefighting Procedures

Extinguishing Madia:	Use dry chemical. CO2 or appropriate foam
Fire Fighting Methods and Protection:	Firefighters should wear full protective equipment and NIOSH approved self-contained breathing apparatus.
Fire and/or Explosion Hazards:	Fire or excessive heat may produce hazardous decomposition products.
Hazardous Combustion Products:	Carbon oxides, Nitrogen oxides

Safety Data Sheet

Section 6 Spill or Leak Procedures

Steps to Take in Case Material Is Released or Spilled: Exposure to the spilled material may be irritating or harmful. Follow personal protective equipment recommendations found in Section 8 of this SDS. Additional precautions may be necessary based on special circumstances created by the spill including; the material spilled, the quantity of the spill, the area in which the spill occurred. Also consider the expertise of employees in the area responding to the spill. Ventilate the contaminated area. Isolate area. Keep unnecessary personnel away.
Prevent the spread of any spill to minimize harm to human health and the environment if safe to do so. Wear complete and proper personal protective equipment following the recommendation of Section 8 at a minimum. Dike with suitable absorbent material like granulated clay. Gather and store in a sealed container pending a waste disposal evaluation. Contain the discharged material. Use an inert absorbent such as sand or vermiculite. Place in properly labeled closed container. Do not flush spill to drain.

Section 7 Handling and Storage

Handling: Wash thoroughly after handling. Do no eat, drink or smoke when using this product. Avoid contact with skin and eyes. Avoid contact with clothing. Keep container tightly closed in a cool, well-ventilated place. Avoid creating and inhaling spray or mist.

Storage: Suitable for any general chemical storage.
Keep container tightly closed in a cool, well-ventilated place.
Material is hygroscopic (absorbs moisture).

Storage Code: Green - general chemical storage

Section 8 Protection Information

	ACGIH		OSHA PEL	
Chemical Name	UWA)_	.(SIEL.)_	UWA)_	.(SIEL.)_
Propylene Glycol	N/A	N/A	N/A	N/A
2-Amino-2-Ethyl-1,3-Propanediol	N/A	N/A	N/A	N/A
2-Phenoxyethanol	N/A	N/A	N/A	N/A

Control Parameters

Engineering Measures: No exposure limits exist for the constituents of this product. General room ventilation might be required to maintain operator comfort under normal conditions of use.

Personal Protective Equipment (PPE): Lab coat, apron, eye wash, safety shower.

Respiratory Protection: No respiratory protection required under normal conditions of use.

Eye Protection: Wear appropriate eye protection when handling this product.

Skin Protection: Avoid skin contact by wearing chemically resistant gloves, an apron and other protective equipment depending upon conditions of use. Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment regularly. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work.

Gloves: Natural rubber, Neoprene, PVC or equivalent.

Section 9 Physical Data

Formula: See Section 3
Molecular Weight: N/A
Appearance: Colorless Liquid
Odor: Mild Sweet
Odor Threshold: No data available
pH: No data available
Melting Point: -60 C
Boiling Point: 100 C
Flash Point: 99 C
Flammable Limits in Air: (Propylene Glycol) LEL: 2.6% UEL 12.6%

Vapor Pressure: N/A
Evaporation Rate (BuAc=1): N/A
Vapor Density (Air-1): NIA
Specific Gravity: >1
Solubility in Water: Soluble
Log Pow (calculated): 1.13 at 25 °C
Autoignition Temperature: No data available
Decomposition Temperature: No data available
Viscosity: No data available
Percent Volatile by Volume: NIA

Section 1O Reactivity Data

Reactivity: No data available
Chemical Stability: Stable under normal conditions.

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Conditions to Avoid:	Sparks, open flame, other ignition sources, and elevated temperatures.
Incompatible Materials:	Caustics (bases), Metals, Strong oxidizing agents
Hazardous Decomposition Products:	Nitrogen oxides, Carbon oxides
Hazardous Polymerization:	Will not occur

Section 11 Toxicity Data

Routes of Entry	Inhalation, ingestion, eye or skin contact.
Symptoms (Acute):	N/A
Delayed Effects:	No data available

Acute Toxicity:

Chemical Name	CAS Number	Oral LOSO	Dermal LOSO	Inhalation LCSO
Water	7732-18-5	Oral LD50 Rat 90000 mg/kg		
Propylene Glycol	57-55-6	Oral LD50 Dog 22000 mg/kg	Dermal LD50 Rabbit 20800 mg/kg	
2-Amino-2-Ethyl-1,3-Propanediol	115-70-8			
2-Phenoxyethanol	122-99-6	Oral LD50 Rat 1260 mg/kg Oral LD50 Mouse 933 mg/kg	Dermal LD50 Rat 14422 mg/kg Dermal LD50 Rabbit 5 ml/kg	

Carcinogenicity:

Chemical Name	CAS Number	IARC	NTP	OSHA
Propylene Glycol	57-55-6	Not listed	Not listed	Not listed
2-Amino-2-Ethyl-1,3-Propanediol	115-70-8	Not listed	Not listed	Not listed
2-Phenoxyethanol	122-99-6	Not listed	Not listed	Not listed

Chronic Effects:

Mutagenicity:	No evidence of a mutagenic effect.
Teratogenicity:	No evidence of a teratogenic effect (birth defect).
Sensitization:	No evidence of a sensitization effect.
Reproductive:	No evidence of negative reproductive effects.
Target Organ Effects:	
Acute:	See Section 2
Chronic:	Not listed as a carcinogen by IARC, NTP or OSHA.

Section 12 Ecological Data

Overview:	Slight ecological hazard. In high concentrations, this product may be dangerous to plants and/or wildlife. Keep out of waterways.
Mobility:	No data
Persistence:	Biodegradation, Dissolved into water
Bioaccumulation:	No data
Degradability:	No data
Other Adverse Effects:	No data

Chemical Name	CAS Number	Eco Toxicity
Water	7732-18-5	No data available
Propylene Glycol	57-55-6	96 HR LC50 PIMEPHALES PROMELAS 710 MG/L 96 HR LC50 PIMEPHALES PROMELAS 51400 MG/L [STATIC] 96 HR LC50 ONCORHYNCHUS MYKISS 51600 MG/L [STATIC]

48 HR EC50 DAPHNIA MAGNA> 1000 MG/L [STATIC]	24 HR EC50 DAPHNIA MAGNA> 10000 MG/L	96 HR EC50 PSEUDOKIRCHNERIELLA SUBCAPITATA 19000 MG/L
2-Amino-2-Ethyl-1,3-Propanediol	115-70-8	Not available

2-Phenoxyethanol	122-99-6	96 HR LC50 PIMEPHALES PROMELAS 366 MG/L [STATIC] 48 HR EC50 DAPHNIA MAGNA> 500 MG/L 72 HR EC50 DESMODESMUS SUBSPICATUS > 500 MG/L

Section 13 Disposal Information

Disposal Methods: Dispose in accordance with all applicable Federal, State and Local regulations. Always contact a permitted waste disposer (TSO) to assure compliance.

Waste Disposal Code(s): Not Determined

Section 14 Transport Information

Ground - DOT Proper Shipping Name:
Not regulated for ground transport by US DOT.

Air - IATA Proper Shipping Name:
Not regulated for air transport by IATA.

Section 15 Regulatory Information

TSCA Status: All components in this product are on the TSCA Inventory.

Chemical Name	CAS Number	§ 313 Name	§ 304 RQ	CERCLA RQ	§ 302 TPQ	CAA 112(2) TQ
Propylene Glycol	57-55-6	No	No	No	No	No
2-Amino-2-Ethyl-1,3-Propanediol	115-70-8	No	No	No	No	No
2-Phenoxyethanol	122-99-6	No	No	No	No	No

California Prop 65: No California Proposition 65 ingredients

Section 16 Additional Information

Revised: 08/21/2018 **Replaces: 06/15/2018** **Printed: 08-25-2018**

The information provided in this (Material) Safety Data Sheet represents a compilation of data drawn directly from various sources available to us. Carolina Biological Supply makes no representation or guarantee as to the suitability of this information to a particular application of the substance covered in the (Material) Safety Data Sheet.

Glossary

ACGIH	American Conference of Governmental Industrial Hygienists	NTP	National Toxicology Program
CAS	Chemical Abstract Service Number	OSHA	Occupational Safety and Health Administration
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act	PEL	Permissible Exposure Limit
DOT	U.S. Department of Transportation	ppm	Parts per million
IARC	International Agency for Research on Cancer	RCRA	Resource ConseNation and Recovery Act
N/A	Not Available	SARA	Superfund Amendments and Reauthorization Act
		TLV	Threshold Limit Value
		TSCA	Toxic Substances Control Act
		IDLH	Immediately dangerous to life and health

3.5. Independent Inspection of Facilities and student exposure to potential toxins

Preface: Faculty, staff, students, and visitors upon entering the FAMU depository of human specimen run the risk of injury or exposure to hazardous materials. To ensure that the health and safety of any and all participants in the space is properly maintained, SOAHS, their SOP, and the health of the faculty and students are evaluated and monitored. All environmental protection and safety procedures shall be checked and evaluated by independent entities that will return their evaluations to the SOAHS in order to inform whether or not the SOP is in fact meeting standards and to allow for better improvement of the SOP in situations where the standards are not being met.

3.5.a. Fire safety

Fire alarms, extinguishers, exits and allowable space for proper fire safety within the lab space and depository is monitored by the FAMU Environmental Health and Safety Department, phone number 850-599-3442. All violations that might place individuals at risk are to be immediately reported to the SOAHS and the University. Appropriate individuals responsible for maintaining the equipment or fire safety standards will be informed and proper actions will be taken to correct the problem.

3.5.b. Facility Security

Security doors, swipe card entrance device, and alarms are monitored and maintained. Any and all issues that might place individuals at risk are to be immediately reported to the main office of SOAHS by the faculty and staff and an applicable associate to the FAMU Police Department at phone number 850-599-3256.

3.5.c. Environmental Health and Safety

Safety Equipment

Eye wash stations, first aid kits, Biohazard Sharpe waste containers, and proper signage within the lab space and depository is monitored by the FAMU Environmental Health and Safety department, all violations that might place

individuals at risk are immediately reported to the SOAHS and the University. Appropriate individuals responsible for maintaining the equipment or fire safety standards will be informed and proper actions will be taken to correct the problem.

Personnel Formaldehyde Exposure

Individual Faculty or student formaldehyde exposure is monitored by the FAMU Environmental Health and Safety located in POMA division of Health Safety. Individuals may be required to wear a Formaldehyde ChromAir Badge (380007-10) to determine the parts per million to formaldehyde. Standard personnel exposure should meet OSHA requirement for formaldehyde. Results from measuring individual exposure will be reported to the SOAHS and the University in order to ensure that the SOP is appropriate. If any violations are detected that might place individuals at risk then SOAHS is immediately contacted so that any non-compliance items will be corrected.

3.5.c.i. Environmental Health and Safety Air Quality and Proper Ventilation Report

3.5.c.ii. Environmental Health and Personnel Formaldehyde Exposure Report

3.5.d. Anatomical Board Independent Inspection of Facilities and Verification of Specimen Inventory Information

Every facility which receives specimens from the Anatomical Board will be independently inspected by an Anatomical Board appointed representative from a different facility. This inspection will include verification of security measures, specimen storage, safety procedures, Pledge of Respect compliance and verification of the location of every specimen on the specimen inventory sheet for that facility. Such inspections will occur at FAMU depository for Human specimen and teaching lab once every three calendar years. The site visit inspection form is displayed below in the SOP and is also available at **http://anatbd.acb.med.ufl.edu/forms**

3.5.d. Site Inspection Form

Florida Agricultural & Mechanical University
School of Allied Health Sciences
334 W Palmer Ave Lewis Beck Suite 306
Tallahassee FL 32307
Telephone: 1-850-599-3818

ANATOMICAL BOARD OF THE STATE OF FLORIDA

Miami Office:
University of Miami Miller School of Medicine
Office of Medical Education
P.O. Box 016960 (R-160)
Miami, FL 33101
Telephone: 305-243-6691

Orlando Office:
University of Central Florida College of Medicine
Health Sciences Campus-Lake Nona 6850 Lake Nona Blvd.
Orlando, FL 32827-7408
Telephone: 407-266-1142

Tallahassee Office:
Florida State University College of Medicine
1115 West Call Street
Box30643000
Tallahassee FL 32306-4300
Telephone: 850-645-8449

Gainesville Office:
University of Florida College of Medicine
Health Science Center
PO Box 100285
Gainesville, FL 32610-0235
Telephone: 352-392-3588

Inspection of Facilities Housing, and Inventory of, Anatomical Specimens Provided by the Anatomical Board of the State of Florida

NAME OF FACILITY: _____

DATE OF INSPECTION: _____

NAME OF INSPECTOR: _____

AFFILIATION OF INSPECTOR: _____

(i) INSPECTION OF FACILITIES

a) PLEASE PROVIDE A BRIEF DESCRIPTION OF THIS FACILITY (include type of building, number of doors, windows, work stations, flooring, AV equipment. If there are windows, are they adequately covered?)

_____
_____
_____
_____
_____

b) AIR FLOW

It is required that laboratories in which specimens fixed with formaldehyde are used be inspected annually by Environmental Health and Safety personnel (or equivalent authority) to ensure adequate air flow and levels of formaldehyde not exceeding 0.75 parts per million for an eight-hour period, in compliance with OHSA regulation 1910.1048c.

Report Attached ☐

(ii) SECURITY

a) Which courses utilize these facilities?

_____
_____

b) What type of security is in place at this facility? (key card, code, video surveillance?)

_____
_____

c) Who monitors security measures in place? Is the list of those who have access to these facilities updated (within 30 days of the end of each course) and are security access procedures similarly updated?

_____

_____

d) What records pertaining to security are kept? (e.g. are video surveillance tapes kept? If so, for how long?)

_____

_____

e) Where are specimens not in use stored? (different rooms, buildings, under refrigeration?)

_____

_____

f) How are specimens no longer in use disposed of? (returned to Anatomical Board, cremated)

_____

_____

(iii) SAFETY

a) Is there a copy of the rules and regulations which must be followed when working in the laboratory clearly visible and available for consultation by all individuals handling human specimens?

YES ☐ NO ☐

b) It is recommended that the following safety materials be available for those handling anatomical specimens provided by the Anatomical Board at this facility:

Gloves ☐	Lab Coats ☐
Eye protection ☐	Face masks ☐
Eye wash ☐	First Aid Kit ☐

Emergency plan for stick injury ☐

Security / Emergency telephone numbers clearly posted ☐

(iv) RESPECT

a) PLEDGE OF RESPECT FORMS

Pledge of Respect forms are ☐ / are not ☐ completed and filed for **ALL** personnel with access to rooms where specimens are housed at this facility.

b) Are the No Visitors Policy, no photography of any kind without permission from the Anatomical Board and no posting of any information pertaining to courses at this facility utilizing specimens provided by the Anatomical board on any social media verbally stated at the beginning of each course offered at this facility?

YES ☐ NO ☐

(v) VERIFICATION OF SPECIMEN INVENTORY

a) Individuals responsible for specimens at this facility are:

1._____
_____

2._____
_____

3._____
_____

b) The inspector should attach a copy of the specimen inventory for this facility, verifying that they have accounted for all specimens and that the specimens are appropriately housed and secured.

c) Please comment or list any concerns you may have pertaining to the housing or use of anatomical specimens at this facility.

I verify that the information contained within this report is correct and that Anatomical Board policies have been made clear to those responsible for anatomical specimens supplied by the Anatomical Board to this facility.

_____
Signature of Inspector

_____
Date

_____
Telephone number of Inspector

4. Review and updating Standard Operating Procedure

To ensure the health and safety of any and all participants in the FAMU Depository of Human Specimens and teaching lab, SOAHS continues to maintain and appropriately updated their SOP as new requirements, new techniques, new safety procedures, and/or new classes are added. These procedures, precautions, and potential new courses will be updated into the existing SOP as needed and the SOP will be reviewed by the SOAHS faculty once a year.

5. Succession Plan

The Anatomical Board requires that each facility receiving human specimens should submit the names and contact information of three staff members (one should be the Chair/Director or Head of Department/Division) who will be responsible for the appropriate handling, storage and security of the human specimens. This should ensure that, if one staff member leaves that facility, other personnel are already familiar with the location of all specimens, procedures in place for their use and can immediately assume responsibility for the said specimens. Thus to be in compliance the following individuals should be listed.

5.1. School of Allied Health – Division of Physical Therapy

5.1.a. Dr. Brown-Cross – SOAHS - Director of the Division of Physical Therapy

5.1.b. Dr. Sherif Gendy – SOAHS - Assistant Professor of the Division of Physical Therapy

5.2. School of Allied Health – Division of Occupational Therapy

5.2.a. Dr. Debora Olivera – SOAHS - Director of the Division of Occupational Therapy

5.2.b. Dr. Adrian T. McCollum – CST- Assistant Professor Department of Biological Sciences and Adjunct Professor for the Division of Occupational Therapy

5.3. Succession Plan Form

Florida Agricultural & Mechanical University
School of Allied Health Sciences
334 W Palmer Ave Lewis Beck Suite 306
Tallahassee FL 32307
Telephone: 1-850-599-3818

ANATOMICAL BOARD OF THE STATE OF FLORIDA

Miami Office:
University of Miami
Miller School of Medicine
Office of Medical Education
P.O. Box 016960 (R-160)
Miami, FL 33101
Telephone: 305-243-6691

Orlando Office:
University of Central Florida
College of Medicine
Health Sciences Campus-Lake Nona
6850 Lake Nona Blvd.
Orlando, FL 32827-7408
Telephone: 407-266-1142

Tallahassee Office:
Florida State University
College of Medicine
1115 West Call Street
Box30643000
Tallahassee FL 32306-4300
Telephone: 850-645-8449

Gainesville Office:
University of Florida
College of Medicine
Health Science Center
PO Box 100285
Gainesville, FL 32610-0235
Telephone: 352-392-3588

Succession Plan

Individuals Responsible for the Security and Appropriate Handling of Anatomical Specimens Provided by the Anatomical Board of the State of Florida

_____
Institution

Primary Individuals Responsible for Specimens:

_____ _____ _____
Name (please type) Signature Date

_____
Address

(____)_____ _____
Telephone Number Email Address

Additional Individual Responsible for Specimens:

_____ _____ _____
Name (please type) Signature Date

_____
Address

(____)_____ _____
Telephone Number Email Address

Head of Department:

_____ _____ _____
Name (please type) Signature Date

_____
Address

(____)_____ _____
Email Signature

AN EQUAL OPPORTUNITY INSTITUTION

6. Exemptions to Policies and Procedures

Any and all potential exemptions to the current policies and procedures must be first approved by FAMU Environmental Health and Safety, the Anatomical Board, and the School of Allied Health. Such exemptions once approved must then be incorporated into a revised SOP prior to the initiation or use of the exemption.

7. How Non-Compliance of Standard Operating Procedure is Handled

7.1. Standard Operating Procedures must be followed; no significant departures, outside of approved exceptions, from the Standard Operating Procedures are allowed.

7.2. Reporting Non-Compliance: The SOP is expected to be followed and maintained however when there is non-compliance this must be reported to the appropriate authority.

7.2.a Student non-compliance: student non-compliance either observed by faculty or other students must first be reported to or addressed by the faculty in charge.

7.2.b Faculty non-compliance: faculty non-compliance observed by other faculty, students, visitors, or staff must first be brought to the attention of the faculty member in charge and then reported to the appropriate administrative head in SOAHS. The non-compliance should be dealt as soon as it is possible.

7.2.c. Non-faculty/Staff non-compliance: non-faculty/staff non-compliance observed by faculty or other students must first be brought to the attention of the faculty member in charge and then reported to the appropriate administrative head in SOAHS. The non-compliance should be dealt with by the most suitable maintenance administration officer and taken care of as soon as it is possible to address the issue.

7.2.d. Visitor non-compliance: visitor non-compliance either observed by faculty, students, or non-faculty staff must first be reported to or addressed by the faculty interacting with said visitor(s) and then reported to the appropriate director and/or Supervisor of the Program within 24 hours of the occurrence.

7.2.e. Facility non-compliance: Facility non-compliance with the Standard Operating Procedure must be reported in writing to the director and/or Supervisor of the Program within 24 hours of the occurrence.

7.3. Anatomical Board reporting of non-compliance: the Anatomical Board will report any detected violations during inspection, during drop off or pick up of human specimen(s)

to the appropriate administration and the proper authorities if deemed necessary by a majority of the Board Membership.

GROSS ANATOMY LABORATORY POLICIES

The bodies available for dissection were donated by individuals who wanted their remains to be used for education and research. As a health care practitioner, you are *favored* to have the opportunity to use this anatomical donation. The rules of the anatomy laboratory are based upon PATIENT PRIVACY, RESPECT, SECURITY, SAFETY, and MAINTENANCE. These rules will be observed in the laboratory **AT ALL TIMES**:

Respect

1. **The anatomical donors are to be treated with the utmost respect at all times**. Inappropriate or improper behavior and/or comments within and outside the laboratory is/are unacceptable.
2. The articulated skeletons, skulls and isolated bones are to be afforded the same respect as the cadavers.
3. **Do not remove the numbered tag from your cadaver.**
4. The cadavers are to be properly maintained. Any suspicion of mold or rot should be reported to the facility director immediately, since it can rapidly spread throughout the body and to other donors in the room. The plastic body bag should be closed after each dissection. **Take good care of your cadaver – it is the best teacher you have in this course.**
5. All cadaver waste tissues are to be properly disposed of. No other waste is to be disposed of in the cadaver waste bins (see below for the disposal of other waste).
6. Dissection tables should be kept clean and free of excessive tissue.
7. **The right of privacy and confidentiality due to all medical patients is extended to our anatomical donors at all times.**
8. Cadavers will be appropriately draped at all times. All regions not being studied should be draped. Entirely cover the cadaver when leaving it for any period of time.
9. Use of cameras, cell phones or other photographic or video equipment is not permitted in the laboratory at any time unless specifically authorized by the course administration.
10. Only students, faculty and other authorized UVA personnel are allowed in the gross anatomy lab. Under no circumstances may a student bring an unauthorized visitor into the lab. Permission to bring a visitor into the lab can be granted only by Drs. Gendy and McCollum and is restricted to healthcare professionals or individuals with an approved academic purpose.
11. **NOTHING leaves the lab without the permission of the facility administrator or the course director.**
12. Food and/or drinks are not allowed in the laboratory.

Security

1. Keep the doors of the laboratory closed **AT ALL TIMES**.
2. Do not share your bone box with anyone except your partners to prevent loss of bones.

Safety

The following safety procedures are in place to prevent injuries and limit exposure to chemicals:

1. Students must wear long pants and closed shoes whenever they are in the laboratory. Open-toed or perforated shoes (e.g., sandals), shorts and skirts are not to be worn in the anatomy lab. You will be asked to leave the laboratory if you are in violation of this dress code.
2. Students must wear a lab coat when in the lab. It is your responsibility to maintain your lab coat in a reasonably clean condition. The faculty will insist you wear your lab coat regardless of how dirty it is.
3. Gloves must be worn throughout the dissection period.
4. Eye protection must be worn whenever you are within five (5) feet of an open cadaver. Regular eyeglasses are sufficient eye protection. Students must wear safety goggles when using hammers, chisels, bone pliers and Stryker saws.
5. All used scalpel blades must be disposed of in the provided "sharps" containers. Never dispose of "sharps" in wastebaskets or garbage cans (see below for the disposal of other waste).
6. All injuries incurred in the gross anatomy laboratory, no matter how insignificant they may appear, must be reported immediately to an instructor. The instructor will administer first aid and determine whether the student should be directed to a facility for further treatment.
7. In case of an EMERGENCY, use the lab phone to call the police (9-911).
8. Students who are pregnant, or believe they may be pregnant, are responsible for discussing attendance in the gross anatomy lab with their physician.

Maintenance

1. The laboratory must be kept neat at all times and you are expected to clean your area after each day's dissection. This includes frequently emptying the bucket at the end of your table and wiping up any large spills from the floor. You are provided space for storing your atlases and dissection tools – please use it! Atlases and tools that are left on the counters will be placed in the lost and found box. Note that proper trash disposal is as follows:

    cadaver (tissue) waste – cadaver waste container
    gloves and cadaver-soaked paper towels, paper towels, paper, etc. – regular gray containers
    blades – red sharps disposal boxes located on counter tops

---

I have read the rules and regulations of the gross anatomy laboratory and understand that any violation thereof is a breach of professional conduct.

_____
Printed Name

_____ 09/05/2025
Signature Date