HAMILTON COLLEGE STUDIO ART DEPARTMENT
Foundations Studio Environmental, Health and Safety (EHS) Handbook

Purpose:

- To serve as a supplemental EHS reference guide for all employees and students within the KTSA Foundations studio (101).

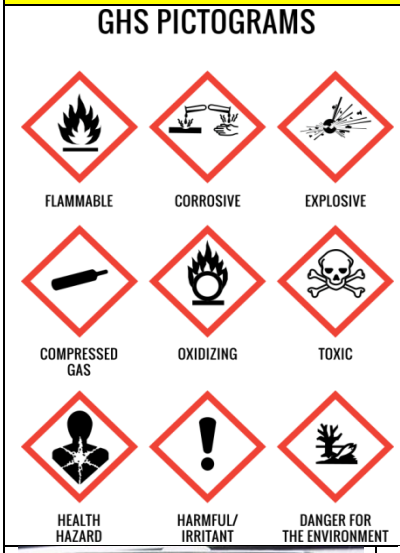
General Facility Responsibilities:

- Students—Understand and adhere to all safe work practices as communicated by faculty and staff, and as outlined in this document.
- Restricted Students (monitors, seniors)—Understand safe work practices of the department and assist faculty and staff with implementation and studio oversight.
- Faculty—Train students and other staff to ensure compliance with all EHS regulatory requirements.
- Studio Operations Manager—Coordinate and act as the liaison between the EHS Director, department faculty, and students to ensure compliance with EHS obligations.
- Director of Environmental Protection & Safety— Oversee the college's EHS requirements, conduct audits, maintain and update compliance documents and plans, train faculty and staff, collect and dispose of departmental waste, and assist with all other regulatory matters.

General Studio Use Guidelines for Students:

- Must be enrolled in a class in order to use the department's facilities and equipment.
- Must understand all terminology used in this handbook.
- Must understand safety and health hazards associated with all chemicals (i.e. through MSDS's or the like).
- Must use equipment and materials for their prescribed purposes only.
- Must know and understand the location and use of safety equipment, e.g. emergency eyewashes/showers, emergency phones, emergency exits, spill kits and fire extinguishers. Note that fire extinguisher use requires additional training.
- Must immediately notify the appropriate authority of any unsafe practice or condition, e.g. faculty, Studio Operations Manager, Custodian, student monitor, EH&S or Campus Safety.
- Are responsible for cleaning and maintaining all workstations, countertops and sinks, and clearing/discarding of trash after each work session.
- Are responsible for maintaining clean, obstruction-free work areas and access to emergency equipment, exits, electrical equipment, and passageways. All aisle-ways must be kept free of chairs, boxes, equipment, and waste receptacles.
- Must not engage in horseplay, practical jokes or other behavior that might confuse, startle, or distract other students.
- Must wash hands frequently during work sessions, after contact with any hazardous materials, before eating, drinking or smoking, and before leaving the studio.
- Must not eat or drink in the studio.
- Must not pour any hazardous waste down a sink drain or allow it to evaporate.

CHEMICAL HAZARD INFORMATION



Original Manufacturer Container Labels & GHS Pictograms

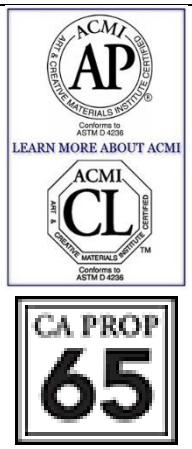
Over the last several years, original manufacturer chemical containers have been phasing-in the labeling provisions of the new OSHA/GHS Hazcom standard. This new standardized label format will use the nine pictograms depicted to the left on both its chemical label and the Safety Data Sheet (SDS). It is important to note that original manufacturer chemical containers pre-dating this new standard may depict hazards through alternative means, like signal words (i.e. danger, warning), NFPA ratings, or words (i.e. flammable, corrosive, poison, etc.). See examples below.

Secondary Workplace Labeling

Chemicals dispensed into secondary containers must be labeled with a Hazcom label using the NFPA format depicted below, which convey safety information numerically.

Chemical Product Inventory & SDS's

All chemical products used in this studio must be inventoried on a departmental spreadsheet, and a SDS (safety data sheet) for each chemical must be maintained and made accessible. It is essential to be familiar with the SDS's for the products you use through training, and SDS's for new products introduced into the studio must be reviewed and assessed before introduction. Hamilton maintains a database of SDS's that can be accessed through MSDS-Online at this LINK. Otherwise, the studio may also keep hard copy SDS's on hand for select high hazard or frequent use chemicals.



Labeling of Hazardous Art Materials Act (LHAMA)
Many chemical materials in Studio Art disciplines also have chemical safety labeling that adheres to LHAMA and the Art & Creative Materials Institute (ACMI). Generally speaking, art chemicals with the AP seal are considered to be low hazard or non-toxic, while art chemicals with the Caution Label (CL) seal, or California Proposition (CA PROP) 65 icon, are considered to have some hazardous properties or ingredients that necessitate additional safety precautions. Alternatively, art chemical labeling may simply say "Conforms to ASTM D-4236". This labeling is acceptable as a general screening tool only for hazardous properties. You should consult the chemical's MSDS for additional safety information, as per the below.

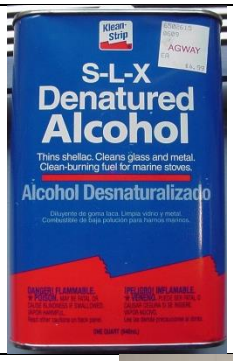
ENGINEERING, VENTILATION & EMERGENCY EQUIPMENT CONTROL MEASURES

Occupancy Based Ventilation Controls
This studio has an occupancy based ventilation system that operates at 3 different modes:

- Mode 1—when the studio is unoccupied, the ventilation fans operate at 25% of design capacity.
- Mode 2—when the ceiling mounted motion detector indicates the studio is occupied, the ventilation fans operate at 50% of design capacity.
- Mode 3—when the studio is being heavily utilized (a class is in session) the instructor or students can direct the ventilation fans to operate at 100% of design capacity by pressing the "Fan Control/Occ Button" at the front of the classroom. The fans will remain at 100% of design capacity for 30 minutes, before returning to 50% of design capacity.

Emergency Controls
This studio has a demarked "safety zone" that includes an emergency eyewash, first aid kit, spill kit, emergency phone and fire extinguisher, which must remain accessible and sanitary at all times.

PERSONAL PROTECTIVE EQUIPMENT (PPE)			
General Studio Attire	As a general recommendation, personal clothing should cover the arms, legs and torso. Wear close-toed shoes (no sandals, crocs).		
Eye Protection	Use eye protection in accordance with the appropriate information from MSDS's. Generally speaking, safety glasses are acceptable during work with chemicals without splash hazards. However the use of chemicals with splash hazards requires the use of indirectly vented chemical splash goggles.		
Hand Protection	The routine handling of solvents or paints with toxic metallic properties requires the use of nitrile gloves for hand protection.		
Body (and clothing) Protection	As appropriate and based upon the type of paints used and the method of application, body protection in the form of an artist's smock may be recommended. Smocks will help to keep paint materials from contaminating personal clothing.		

ENVIRONMENTAL PROTECTION & COMPLIANCE	
Foundations Studio Waste Management This studio uses many chemical materials, each of which are subject to a hazardous waste determination. Generally speaking, consider the following…	
Chemical Container Rules Chemical containers whose contents have been entirely used up and are empty (like a denatured alcohol container) may be disposed of as trash, as they are not regulated as hazardous waste. However, partially full chemical containers that contain substantial residual chemical materials (like small oil paint tubes and spray paint cans) must be collected because they **ARE** subject to hazardous waste determinations.	 
Sink Use & Disposal Rules There is a sink in the studio that conveys wastewaters to the sanitary sewer for treatment and disposal. Sinks primarily provide for hand hygiene, and other tool washing/rinsing activities (even when what's being washed/rinsed was used with chemical materials). However it is never acceptable to dispose of chemical materials directly down the sink. Even if the chemical is not a regulated chemical material (like graphite), the addition of gritty material could both clog the drain and violate local sewer use ordinances.	

Hazardous Waste Generation & Satellite Accumulation Areas (SAA's)
The foundations studio has a designated SAA, which is the location at or near the point where hazardous wastes are routinely generated and stored. Hazardous waste containers must be marked with a hazardous waste label that clearly indicates the contents. The date on the label should only be filled out by the Director of EHS upon container pick up.

Flammable Storage Cabinet SAA
The bottom compartment of the studio's flammable storage cabinet is the designated SAA for hazardous wastes. A labeled 5-gallon bucket for paint wastes and a small 1 liter bottle for used alcohol wastes are found here, to collect regularly generated hazardous wastes by studio personnel. These containers must be closed and stored within the flammable storage cabinet when they are not in use.

Typical Foundations Studio Hazardous Waste Streams
Hazardous wastes from the foundations studio are typically of 2 varieties.

- Paint waste is normally characteristic of ignitability or flammability and toxic metals (barium, cadmium, chromium, lead). Paint pallets and near empty paint tubes (oil-based or acrylic-based) should all be placed in the labeled 5-gallon bucket.
- Liquid alcohol wastes characteristic of ignitability or flammability should be placed in the labeled 1 liter bottle.

Other Hazardous Wastes in the Foundations Studio
When the foundations studio uses Krylon Fixitif aerosol spray cans in the KTSA 117/Sculpture paint spray booth, it is necessary to adhere to the ventilation and hazardous waste generation/storage rules that apply in that separate location, in accordance with the below.

KTSA 117/Sculpture Paint Spray Booth
The paint spray booth room is a small, stand-alone room within the sculpture suite that enables personnel to perform paint spraying/drying activities in an isolated and well ventilated setting. All spray painting activities within the spray booth must be documented in the provided log book, noting the date of the activity, and the quantity of spray paint utilized. The spray booth may be turned on via a button on the inside of the entrance door. Emergency equipment in this room includes a fire extinguisher, emergency eyewash and spill kit, and must remain accessible and sanitary at all times.

Paint Spray Booth Hazardous Waste
The flammable storage cabinet and 5-gallon bucket inside a secondary containment spill pallet is the designated SAA for this studio, primarily for aerosol spray paint can wastes.

OTHER FIRE SAFETY & EMERGENCY PREPAREDNESS CONSIDERATIONS

Emergency Equipment
The Studio Operations Manager is responsible for ensuring that all emergency equipment specified above is accessible and sanitary at all times through routine inspection. Additional emergency spill response equipment is maintained by the Director of EHS in KTSA, for deployment as needed.

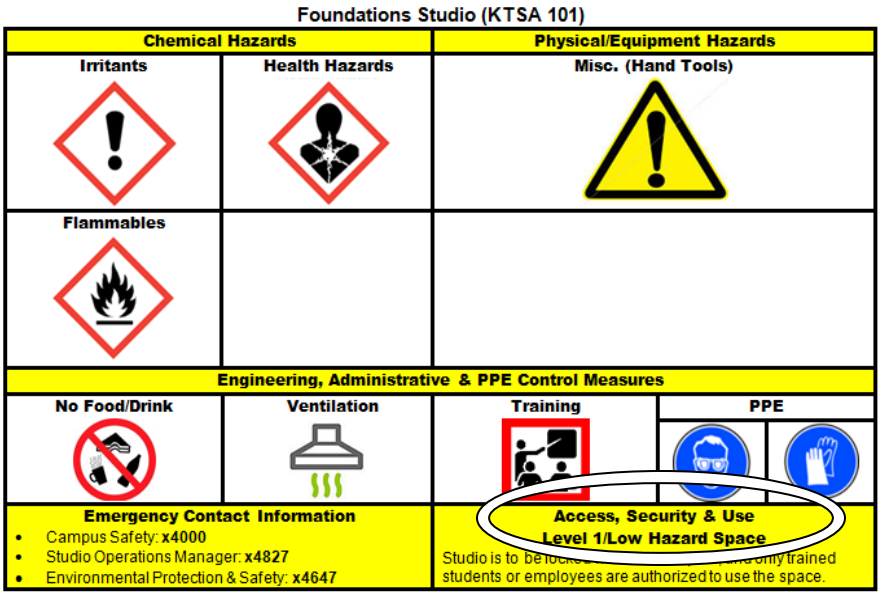
Fire Safety
All who work or study in KTSA should be familiar with the fire safety plan for the building, which can be found at this LINK. This plan identifies the locations of emergency equipment located outside of studios (pull stations, fire extinguishers), egress paths, and fire safety system descriptions. In the event of a fire alarm signal (including the activation of the clear fire strobe to the right), evacuate the building and proceed to your designated muster point (**KJ circle**). In the event the amber alert signal (strobe to the left) is activated locally by a Building Coordinator, shelter in place and await further instruction.

Emergency Phone #'s	Campus Safety—4000 (emergency line), 4141 (non-emergency line) Physical Plant—4500 HCEMS—4000 Environmental Protection & Safety—4647 Studio Operations Manager—4827

STUDIO ACCESS, SECURITY & USE GUIDELINES

Studio Access
KTSA is generally accessible to the entire College community between the hours of 8:00 am and midnight, by way of its main entrance doors being unlocked. Between the hours of midnight and 8:00 am, KTSA main entrance doors will be controlled via the Card Access system, whereby only employees who regularly reside in the building and certain authorized students must use their Hill Card to gain access to the facility. Student access during controlled hours will be limited to those actively enrolled in classes, and based upon studio use criteria established below.

Studio Security
All studio spaces where chemical, physical or environmental hazards are used and/or stored (as identified via a hazard sign) shall be secured against unauthorized access, so as to prevent theft, releases/spills, sabotage or security breaches. The principal strategy to achieve this requirement is closed and locked/controlled studio doors. The only time studio doors should be open/ajar or unlocked is when a class is actively in session, or when it can be directly supervised by department personnel outside of class sessions.



Studio Use

The foundations studio is designated as a **Level 1/Low Hazard Space**, as per the hazard sign depicted to the left. Student use of the studio and all materials contained therein is restricted to those enrolled in classes, or as authorized by department faculty/staff. The buddy system is recommended for all authorized studio users.

ATTACHMENT A
HAMILTON COLLEGE STUDIO SAFETY AGREEMENT FOR STUDENTS

Hamilton College is committed to providing *all studio users* a safe environment in which to work and learn. Students must be well informed of the chemical and physical hazards associated with all studio activities, and conform to the following rules established for the use of these facilities:

1. The use of any hazardous chemical material, or the use/operation of any equipment/machinery/power tool, must be approved by your instructor.

2. Unauthorized facility use, horseplay or pranks are strictly prohibited in the studio.

3. Report all injuries to your faculty member or instructor immediately. Any student injured in the studio must be seen by the Health Center.

4. Eating, drinking or smoking in a studio where chemicals are actively in use is strictly forbidden. Eating or drinking is acceptable in suitable non-chemical use or storage areas, or as specified by your instructor.

5. Everyone who uses this studio must know the locations of emergency equipment, such as fire extinguishers, eyewashes, showers, first aid kits, spill kits and telephones.

6. Wear the appropriate attire when working with chemicals or dangerous equipment in the studio. Wear the necessary Personal Protective Equipment (PPE) as specified by your instructor, and do not wear loose clothing, dangling jewelry, or your hair in an unconfined manner when using equipment that may catch these loose items.

7. When using equipment, machinery or power tools, obey the instructions, Standard Operating Procedures, or manufacturer's recommendations/warnings governing their use at all times.

8. All hazardous chemical materials must be properly used, stored, labeled and disposed of.

9. Know the flammability, reactivity, health hazard and special hazards of any hazardous chemical material you must use. Report any signs or symptoms indicating a potential overexposure to a hazardous chemical to your instructor.

10. After using chemicals in the studio, always wash your hands prior to leaving, even after wearing protective gloves.

11. Dispose of hazardous chemical materials in a manner specified by your instructor. Do not use sinks to drain dispose of chemical materials. Sinks are only to be used for rinsing or other hygienic purposes. Do not dispose of any residual chemical waste materials unless you are certain that the waste stream may be discarded as trash/solid waste. Report all spills to your instructor immediately.

12. Maintain the areas you use in the studio in a tidy, neat, and well-kept manner. Since you individually are in the best position to know what chemicals or products are in use during certain studio activities, do not assume that others within your class, your instructors, or college support staff will clean up messes they were not responsible for.

I, _____, have carefully read the studio safety agreement for Hamilton College and understand that these rules will be rigorously and impartially enforced. I also understand that willful and/or repeated violations of these safety rules will result in my studio privileges being revoked.

Student Signature:	Date:
Class Name/Section & Instructor:	