

HAMILTON COLLEGE STUDIO ART DEPARTMENT

Senior Studio Environmental, Health and Safety (EHS) Handbook

Purpose:

- To serve as a supplemental EHS reference guide for all employees and students within the KTSA Senior studio (201).

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

GHS PICTOGRAMS



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.

CHEMICAL X

DANGER

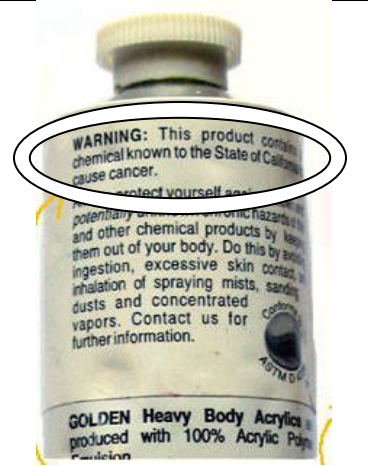
HAZARD STATEMENTS:
Fatal if swallowed.
Causes severe skin burns and eye damage.

PRECAUTIONARY STATEMENTS:

- Wear protective gloves.
- Wear face protection.
- Do not eat drink or smoke when using this product.
- Wash hands thoroughly after use.
- Store in a sealed container.
- **IF ON SKIN:** Rinse immediately with with cool water.
- **IF IN EYES:** Rinse thoroughly with water and seek medical attention.
- **IF SWALLOWED:** Do not induce vomiting. Seek medical attention.

Dispose of contents/container in accordance with local regulations.
Chemical X Manufacturing, 1234 Over There St., (123) 456-7890

See the S.D.S for more information.



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.

HEALTH HAZARD

4-Deadly
3-Extreme danger
2-Hazardous
1-Slightly hazardous
0-Normal material

FIRE HAZARD
Flash Points

4-Below 73 F
3-Below 100 F
2-Below 200 F
1-Above 200 F
0-Will not burn

SPECIFIC HAZARD

Oxidizer OXY
Acid ACID
Alkali ALK
Corrosive COR
Use NO WATER
Radiation Hazard ☼☼

INSTABILITY

4-May detonate
3-Shock and heat may detonate
2-Violent chemical change
1-Unstable if heated
0-Stable





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.

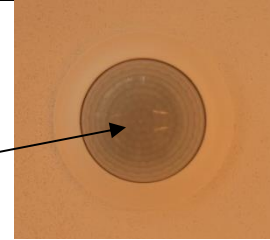


ENGINEERING, VENTILATION & EMERGENCY EQUIPMENT CONTROL MEASURES

Occupancy Based Ventilation Controls

The 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” near the wall by the paint spray booth controls. The fans will remain at 100% of design capacity for 30 minutes, before returning to 50% of design capacity.



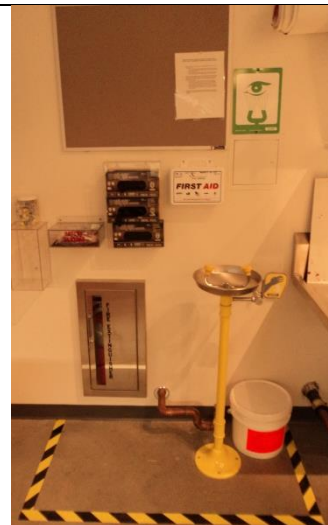
Paint Spray Booth

There is a paint spray booth in the back corner of the studio 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 adjacent to the “Fan Control/Occ. Button” noted above. The light switch is located to right of the paint spray booth’s on/off switch.








Emergency Controls

The senior studio has a demarked “safety zone” that include a fire extinguisher, emergency eyewash, emergency phone, first aid kit and spill kit, 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, cros).		
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. The use of the Safety Kleen paint brush cleaning station to dispense solvent or clean brushes/equipment does involve a splash hazard. Therefore, wear 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.		
Respiratory Protection	Use ventilation controls as your first, best way to minimize exposure to respiratory hazards in the senior studio. The voluntary use of an N-95 filtering facepiece (or dustmask) is acceptable as a safe work practice when dealing with low hazard or fugitive dusts on an intermittent basis.		

ENVIRONMENTAL PROTECTION & COMPLIANCE

Senior Studio Waste Management

The senior 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 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 cans of spray paint or small oil paint tubes) must be collected because they **ARE** subject to hazardous waste determinations.



Sink Use & Disposal Rules

There is a sink in the senior 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 with dry plaster-of-paris), the addition of gritty material could both clog the drain and violate local sewer use ordinances.



Paint Brush Cleaning Station

The paint brush cleaning station provides solvent to thin oil based paint and clean brushes or other contaminated materials. It strains and recycles solvent for reuse, until it is serviced by Safety Kleen every 2 months and managed as hazardous waste at that time. The lid to the unit must remain closed when the device is not in use, and no other solvents originating from commercial chemical products (like turpentine, linseed oil, paint thinner, etc.) may be poured off into this device. Wear the appropriate PPE when using this device, as per the above.



Hazardous Waste Generation & Satellite Accumulation Areas (SAA's)

The senior 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. Labeled 5-gallon buckets are found here, used to store regularly generated hazardous wastes by studio personnel. These buckets must be closed and stored within the flammable storage cabinet when they are not in use.

5-gallon Pedal Activated Safety Can

This device (by the paint brush cleaning station) is intended to temporarily store hazardous wastes during class periods. On a regular or as needed basis, hazardous wastes from the safety can must be relocated to the 5-gallon buckets in the SAA.



Typical Senior Studio Hazardous Waste Streams

Hazardous wastes from the senior studio are typically of 3 varieties, for which there are labeled 5-gallon buckets in the designated SAA, as follows:

- Painting waste, comprised of paint pallets, near empty paint tubes, and solvent stained rags/paper waste, all of which is characteristic of both ignitability/flammability and toxic metals (barium, cadmium, chromium, lead). Note that both oil and acrylic paints often have toxic metal components, so be sure to check appropriate MSDS information.
- Spray paint waste, comprised of partially full spray paint cans, characteristic of ignitability/flammability and pressure.
- Used paint spray booth filters, characteristic of toxic metals (barium).

Painting Waste:

Paint Pallets Near Empty Paint Tubes Solvent Rags



Spray Paint Waste



Used Filter Waste



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.



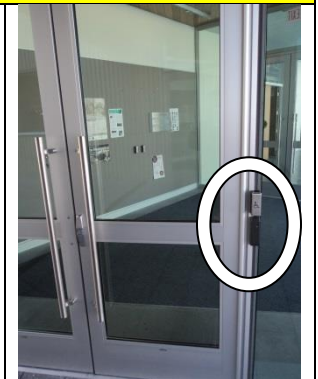
Emergency Phone #'s

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.

Senior Studio (KTSA 201)

Chemical Hazards		Physical/Equipment Hazards	
Irritants 	Health Hazards 	Misc. (Hand Tools) 	
Flammables 		Paint Brush Cleaning Station 	
Engineering, Administrative & PPE Control Measures			
No Food/Drink 	Ventilation & Booth 	Training 	PPE 
Emergency Contact Information <ul style="list-style-type: none"> • Campus Safety: x4000 • Studio Operations Manager: x4827 • Environmental Protection & Safety: x4647 		Access, Security & Use Level 3/Significant Hazard Space Studio must be locked when unoccupied, and only trained students or employees are allowed access to the space.	

Studio Use

The senior studio is designated as a **Level 3/Significant 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. While seniors are EHS-trained and granted greater studio access/use privileges, the buddy system is strongly recommended based upon the higher hazard nature of their work.

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: