

HAMILTON COLLEGE STUDIO ART DEPARTMENT

Environmental, Health and Safety (EH&S) Handbook

PAINTING

Purpose:

To serve as a supplemental EH&S guide and reference for students.

General Responsibilities:

- Students—Understand and adhere to all safe work practices as communicated by faculty and staff, and as outlined in this document.
- Student Monitors—Understand safe work practices of the department and assist faculty and staff with implementation and oversight.
- Faculty and Staff—Train students and other staff to ensure compliance with all EH&S regulatory requirements.
- Materials Technician—Coordinate and act as liaison among EP&S Director, department faculty, and students to ensure compliance with EH&S obligations.
- Director of Environmental Protection & Safety—Oversee college EH&S 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.

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 chemicals (i.e. through MSDS's).
- Must use equipment and materials for their prescribed purposes only.
- Must know and understand the location and use of safety equipment, e.g. safety showers, emergency eyewashes, fire extinguishers, and emergency exits.
- Must immediately notify the appropriate authority of any unsafe practice or condition, e.g. faculty, Materials Technician, Custodian, student monitor, or campus safety. All chemical spills must immediately be cleaned and disposed of properly.
- Are responsible for cleaning and maintaining easels, sinks and countertops, and clearing and discarding all 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 session, 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 or solid waste down a sink drain or allow it to evaporate.

CHEMICAL HAZARD INFORMATION



Chemical Hazards

Academic painting studios typically contain a variety of chemical materials, each with different hazard properties:

- Flammable solvents (inhalation, ingestion, contact hazards);
- Combustible paints (inhalation hazards);
- Flammable spray paints (inhalation, ingestion, contact hazards);
- Latex/acrylic or oil paints, with varying amounts of metallic pigment (ranges from low/no hazard to ingestion, contact hazards).



While painting chemical labels and warnings should always be looked at and consulted, more important and thorough safety information can be obtained from MSDS sheets located within the studio (or through the Materials Technician or faculty members).



Labeling of Hazardous Art Materials Act (LHAMA)

Many painting chemicals have additional chemical safety labeling under the LHAMA. Generally speaking, art materials with the AP seal are considered to be low hazard or non-toxic. Further, art materials with the CL seal, or California Proposition 65 icon, are considered to have some hazardous properties or ingredients that necessitate additional safety precautions. See additional examples below. Whatever the case may be, you should consult the chemical's MSDS for additional safety information, as per the above.



The Safety-Kleen Paint Brush Cleaning Station

The paint brush cleaning station contains 7 gallons of combustible solvent for use in thinning oil based paints, and cleaning brushes or other contaminated materials after use. The unit screens and recycles solvent in between uses, and is regularly replenished every 2 months. A few noteworthy points:

- Only solvent dispensed from the station may be returned to it (so no other solvents, like turpentine, should ever be poured back into it).
- When the station is not being used, the top lid must be closed.
- Do not use this device to thin or clean non-oil based paints (like latex/water based or acrylic gesso paints).
- Only utilize/transfer small amounts of the station's solvent into metal containers for use at a painting easel, as the solvent can cause plastic or other non-metallic containers to break down.
- This solvent is an inhalation, ingestion and contact hazard, so minimize exposure to it at all times and turn the nearby ventilation fan on when using.
- Follow the personal protective equipment practices outlined below.



Restricted Chemical Materials in Painting

Paints that go by the name of "Flake White" or "White Lead" may contain up to 70% lead, and are restricted from use by students in communal painting studios. However, there are many other paint types that use toxic metals (nickel, cadmium and chromium in particular) which may be just as hazardous. See the manufacturer specific or Dick Blick product search links to the right, and pay particular attention when an MSDS identifies both the CL and CA Prop 65 icons. See your faculty member or the Materials Technician regarding any other restricted paint types.

[Gamblin MSDS link](#)
[Golden Acrylics MSDS link](#)
[Grumbacher MSDS link](#)
[Holbein MSDS link](#)
[Williamsburg MSDS link](#)
[Winsor-Newton MSDS link](#)
[Dick Blick Product Search link](#)

PERSONAL PROTECTIVE EQUIPMENT (PPE)

General Attire	Clothing should cover arms, legs, and torso. Wear close-toed shoes (no sandals, crocs).		
Eye Protection	While general painting activities do not normally require eye protection, the use of solvents (like from the paint brush cleaning station) represents a potential splash hazard. Wear either safety glasses or safety goggles.		
Hand Protection	Always minimize direct contact between your hands/skin and painting chemicals (especially solvents and oil-based metal pigments). If contact with such materials is a necessity (like during clean-up), employ single-use nitrile gloves to protect your hands.		

OTHER ENGINEERING/VENTILATION & CHEMICAL STORAGE CONTROL MEASURES

	Ventilation When the paint brush cleaning station is in use, wall mounted window fans should be on to control and minimize airborne exposure to solvent vapors. Note that there are two fans in the List main painting studio, and one fan (on a timer) in the Dunham main painting studio.	
	Chemical Storage All chemical materials that are flammable or combustible in nature should be stored in the studio's 45-gallon flammable storage cabinet when they are not in use. This shared storage cabinet must also be kept neat and clean at all times.	

ENVIRONMENTAL PROTECTION & COMPLIANCE

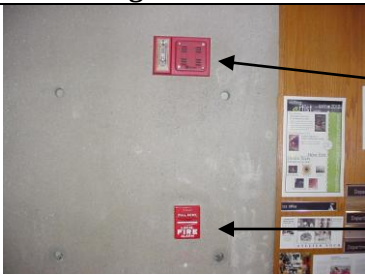
The Management of Painting Studio Wastes

	Flammable/Combustible Solvents Dispensed solvents from the paint brush cleaning station should be returned to it, for recycling and eventual disposal as hazardous waste through Safety-Kleen every 2 months. Any other liquid solvent wastes originating from commercial chemical products (like turpentine, linseed oil, paint thinner, etc.) must be poured off into the red 5-gallon container in the flammable storage cabinet for similar disposal purposes.	
		
		

Pallets Contaminated with Oil Paints and Solvents, and the Oil Paint Tubes Themselves

Waxy/paper pallets with oil based paint or solvents on them, and any partially full oil paint tubes that are to be discarded, all need to be managed as a hazardous waste (both ignitable and toxic due to metal content). These wastes may both be temporarily stored within the red 5-gallon container depicted above, but must ultimately be transferred to a yellow 5-gallon bucket for disposal. These containers must be closed when they are not actively receiving wastes, and labeled with a "hazardous waste" label.

****Important Note**—many latex/acrylic paints (and their contaminated pallets) also contain toxic metal pigments (and are marked with a CL label accordingly). If and when this is the case, any partially full latex/acrylic paint tube or container, as well as their contaminated pallets, must similarly be disposed of as hazardous waste (in yellow 5-gallon hazardous waste buckets).

EMERGENCY EQUIPMENT—KNOW THE LOCATION OF THE FOLLOWING...		
	Emergency Eyewash Equipment: An “Emergency Personal Eyewash” station is located on the studio walls of both the main List and Dunham painting studios. First Aid Kits Similarly, a first aid kit is located in both studios.	
	Chemical Spill Kits: • 2 spill kit types are located in List. • The larger acid and solvent spill kit (left) is located in the Materials Technician’s office, and smaller spill bucket is located inside the 45-gallon flammable storage cabinet in the List painting studio.	
Emergency Shower	2 nd floor List Printmaking corridor (none in Dunham)	
Fire Extinguishers	Main hallways/exit corridors of List, and in all studios	
	Fire Alarm Visual/Audible Enunciators & Pull Stations • There are 4 fire alarm enunciators and pull stations on the west side of List (all near building exits), by or within rooms 111, 114, 115b and 230. • In the event of a fire alarm signal, evacuate the building and proceed to your designated initial gathering point. • In the event of a fire or some other emergency warranting immediate Campus Safety notification (and in the absence of direct access to a phone), use the pull station to call Campus Safety to the scene.	
Emergency Phone #'s	<u>Campus Safety</u>—4000 (emergency line), 4141 (non-emergency line) <u>Physical Plant</u>—4500 <u>HCEMS</u>—4000 <u>Environmental Protection & Safety</u>—4647 <u>Materials Technician</u>—4827	

Painting Studio Use & Misc. Safety Considerations

- While studio art activities often require independent work, working alone or without supervision is generally discouraged. Further, studio art activities that utilize hazardous chemicals or dangerous equipment may be subject to other restrictions, as per the below.
- All List studios are open Mon-Fri 9 am to midnight, and Sat/Sun noon to midnight. Students are not to be in the building or studio areas outside of these time frames. The Dunham studio is open at times to be determined by the faculty.
- As noted above, student use of heavily leaded paints (like flake white or white lead) is not permitted in any painting studio. The use of other chemical hazards should be evaluated by the Materials Technician or your Professor.
- The Safety Agreement in attachment A below may be used by the Studio Art department to help facilitate a safe and environmentally friendly place of working and learning.
- Student studio monitors with additional supervisory roles for the art department, and who are compensated for their efforts, require additional training beyond the scope of this handbook.

ATTACHMENT A
PAINTING STUDIO SAFETY AGREEMENT FOR STUDENTS

Hamilton College Student Safety Agreement Form

Hamilton College is committed to providing *all workshop/studio users* a safe environment in which to work and learn. Students must be well informed of the chemical and physical hazards associated with workshop/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 workshop/studio.
3. Report all injuries to your faculty member or instructor immediately. Any student injured in a workshop or studio must be seen by the Health Center.
4. Eating, drinking or smoking in a workshop or 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 a workshop or studio must know the locations of emergency equipment, such as fire extinguishers, fire blankets, eyewashes, showers, first aid kits, spill kits and telephones.
6. Wear the appropriate attire when working with chemicals or dangerous equipment in a workshop or studio. Wear the necessary Personal Protective Equipment 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 workshop/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 workshop/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 workshop/studio activities, do not assume that others within your class, your instructor's, or college support staff will clean up messes they were not responsible for.

I, _____, have carefully read the workshop/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 being dismissed from the class.

Student Signature:

Date:

Class Name/Section & Instructor: