

Health & Safety Manual 2023–2024

Health & Safety for Members, Students & Studio Users

Health and Safety is paramount, and no one accessing Spike Print Studio (SPS) has a right to endanger either themselves or anyone else through uninformed or negligent use of implements, materials, or machinery. SPS has compiled this Health and Safety Manual to provide basic information on safe practices and procedures in Printmaking. It is intended to protect you and those around you. It is a basic requirement that you read and understand this manual before beginning to work at SPS. If you have any questions about the contents, please contact the Administration Manager. Anyone who uses materials or machinery in a hazardous or potentially hazardous manner may be immediately barred from further access to SPS and may be subject to additional disciplinary action. The Studio Technician needs to sign you off on all studio equipment. You cannot use equipment until you are passed to do so.

Contacts

Address: Spike Print Studio, Spike Island
133 Cumberland Road Bristol BS1 6UX

Tel: 0117 9290135

Email: info@spikeprintstudio.org

Website: www.spikeprintstudio.org

Charity Number: 1175637

Parking

Residents parking scheme is in operation Monday – Friday. Please check the operating hours carefully as they vary!

Access

Swipe card and internal code.

Spike Island Reception will buzz through non keyholders. Day students must check in with reception which will have a list of students on current courses.

Emergency Contact Numbers

All emergency contact numbers are on the studio noticeboard in the kitchen area. These are updated regularly.

Fire Drill

Fire and Emergency Procedures

Notices and signage showing the Fire and Emergency procedures and the locations of Emergency Exits are displayed throughout Spike Print Studio and Spike Island. Please make yourself familiar with the locations of the emergency exit doors. This will have been explained in your studio induction.

- The signal for the evacuation of the building is a CONTINUOUS ALARM SOUND. On hearing this signal, you should follow the evacuation procedure.
- Leave the building at a rapid walking pace by the nearest available exit. You should push open the normally locked emergency exit doors.
- Do not stop to collect personal belongings.
- If you are the last one leaving the studio, close all doors.
- Do not use lifts.
- Always help a disabled person leave the building.
- Assemble outside the shop, McColls, so that Mardyke Ferry Road provides a fire break.
- Do not re-enter the building until you are told that it is safe to do so by the security staff.
- As part of security and Health & Safety you must use the online booking system if you are a member and use the signing in diary as a member and if you are a visitor.
- Fire doors should always be closed.

Reporting of Accidents

Anyone involved in an accident in Spike Print Studio should report this immediately to a member of staff who will complete an Accident Report Form (AR1 Form) as soon as possible.

Tutors: Accident Report Forms can be found in the office. If you are an evening tutor and the office is closed, you will find them in the First Aid Box in the kitchen area. Please fill in the details and return to the office. Further action will be taken by the Studio Director if needed.

Hazard Spotting

If you notice anything which you think could give rise to a risk or injury or cause ill health for example, please report this to a member of staff as soon as possible.

Location of First Aid Boxes

First aid boxes are located in the etching studio and the screenprinting studio by the kitchen sink. Eye washes are located in the acid area. These boxes are checked regularly to maintain supply and within date products.

Students and other Studio Users

Your tutor will take you through the fire drill in the first session.

The Studio Technicians will explain the fire drill to all casual Studio Users during their induction.

PRINTMAKING

Members can only use equipment for which they have received training from the Studio Technicians.

Students and other studio users can only use equipment once instructed by the tutor.

General Hazards

Although the techniques of intaglio, relief and screenprinting vary considerably there are general rules that should be adhered to in the studio. All studio users must wear appropriate clothing, footwear and PPE. Flip flops or opened toed sandals are not permitted whilst working in the studio. Long hair must be tied back, and dangling jewelry removed before operating any of the presses.

All processes involve ink of sorts, be it acrylic or oil based. The hazards that occur during the inking and handling of prepared inks are minimal and usually occur through skin contact and accidental ingestion. To avoid any ingestion through hand to mouth contact, do not eat or drink in the studio while working. This can be a problem particularly with hand-wiping techniques for Intaglio. Using bare hands increases the possibility of getting the ink in cuts and sores and of transferring ink from hands to mouth.

There are no hazards due to inhalation of the pigment unless ink is allowed to dry on surfaces where it can eventually form a powder.

When cleaning up oil-based ink using solvents you must be aware that solvents are highly toxic by inhalation and moderately toxic by repeated skin contact, causing dermatitis. Do not wash your hands with solvents; appropriate gloves should be worn to avoid skin contact and must be used in the solvent cleaning up room. Solvent-soaked rags must be placed in the red metal bin. Do not put solvents down the sinks. Vegetable oil is provided by the studio and should be used with an ink scraper to clean the inking slabs.

INTAGLIO

Intaglio printmaking processes include etching, engraving, drypoint and collagraph.

Tools

When using etching, dry point or engraving tools there is the chance of cutting yourself through improper use. Hold the tools properly and always cut in a direction away from you with both hands behind the blade. Always keep the tools sharp.

Etching Grounds

Some of the ingredients which make up both hard ground and soft ground are flammable and can cause skin and eye irritation; avoid prolonged contact. Xylene is often used in making up hard ground, but as it is non-essential to the mix and highly toxic, it should be deleted if you are making your own hard ground or alternative supplies are available.

Stop-outs and Varnishes

Use these in a well-ventilated area as some of them

contain toxic ingredients (for example Alcohol, Resin, Asphaltum) for more information see the MSDS.

White Spirit & Meths

These should only be used in the designated area and with the extraction fan running. Always wear gloves, and a mask, it is advised that they are worn especially if using for prolonged period. After use return all materials to the flammable liquids cupboard and dispose of any rags or empty containers in the metal bin provided. More information is available in the H&S in the SPS office.

Whiting & Ammonia

When degreasing a plate with a mixture of whiting, water and ammonia, wear gloves and a mask, only use a few drops of ammonia. Eye protection should be worn to avoid eye contact. There are safer alternatives such as salt and vinegar that can be used instead. More information is available in the H&S in the SPS office.

Ferric Chloride

Ferric Chloride is moderately irritating to the skin. It is also moderately toxic by ingestion and inhalation.

Always wear PVC coated heavy-duty gloves and eye protection when handling Ferric, wear an apron and avoid contact with sink. If eye contact occurs use the eye wash station and if skin contact occurs rinse with water and soap and remove all contaminated clothing. Seek medical attention if severe or if irritation continues. More information is available in the H&S in the SPS office.

Keep baths covered after use.

Aquatint Resin

Aquatint resin is harmful when inhaled.

Masks of category FFP2 / FFP3 or above must be worn when in the designated area. All windows and doors in the area must be kept closed to avoid air born resin an extraction fan automatically comes on when using the room. More information is available in the H&S located in the SPS office.

When using the heat gun to melt Aquatint, please use appropriately and take caution as the heated element

and plate can get very hot. Turn off immediately after use and allow metal to cool before handling. Handling the metal after heated can cause burns and transferring to another location such as the wooden surface in the aquatint room can bond both materials together by melting into the wood.

Unplug equipment when finished.

Smoking the Plate

Smoking plate area

There is a designated space for smoking your plates in the etching studio if you choose to do this process. You cannot do this process anywhere else.

- Before you start you must clear the space underneath of any paper or objects. You will be working with a naked flame so make sure your hair is tied back and that you take due care.
- Do not wear plastic gloves.
- After applying the hard ground, let plate cool down and then place it upside down in the plate holder ready to smoke.
- After smoking the plate will be extremely hot. Let the plate cool down before you remove it from the holder.
- Make sure the tapers are put out.

Presses

The presses are all handset and operated. Tie back any long hair and remove any hanging, jewellery, scarves, ties, headphones, etc. that might get caught. Be aware of who is around you and where the press is going to end up. When operating the press be aware of your own posture and adopt a position comfortable for you. Never twist, lift, or hold heavy objects when operating the presses. Do not raise rollers too high to avoid the bed sliding out. Always set up and remove blankets, with the bed central to the press.

Hotplates

Please make sure that hotplates are turned off after use and that they are left free of ink. Inking areas next to the hotplates should be cleaned using a rag and vegetable oil followed by surface cleaner or warm soapy water. Glass cleaner is provided as a final clean.

SCREENPRINTING

Water-based screenprinting on paper and other substrates.

Coating and cleaning a screen

When coating your screen with light sensitive emulsion, always wear gloves to avoid skin contact. Wash skin with water and soap.

Always switch on the extraction when using the washout room when degreasing or decoating a screen. Both chemicals are classed as non-hazardous, however, gloves, masks and eye protection are provided and are required, especially if you have respiratory problem, sensitive skin, or dermatitis.

Using the pressure washer

- Always wear ear defenders and a mask. Goggles or a visor are also recommended especially if you are sensitive to chemicals used.
- Wash off any chemicals with the hand spray gun before blasting screens to avoid them becoming airborne. Start at the top of the screen and work systematically down the screen.
- Switch on unit where indicated.
- Pick up the lance carefully and do not press trigger until the lance is pointing at the washout booth backboard. Once water contact has been made with the backboard slowly move it across to clean your screen.
- Turn off the unit when finished and spray into washout booth to release pressure.
- Put lance back in holder.
- Any water spillage needs to be mopped up and caution taken until dry.

Exposing a Screen

Our new self-contained LED exposure unit makes it safe for a student or member to be present when exposing their screen in the correct manner. Please do not use the exposure unit until you have been inducted by a member of staff or technician. Operate the equipment only as instructed.

Using the vacuum bed (also known as hand bench or screenprinting press)

When using the vacuum bed be aware that it

comprises of heavy metal parts and may have handles, clamps or levers that stick out.

Adjustments to the bed can be made to ensure it is correctly set for the individuals printing needs. Make sure you check the bed before printing. When printing, make sure that you brace your body firmly to avoid backache. This can be done by tightening your stomach and keeping your elbows close to your body, which takes the stress off your back. Screenprinting is a whole-body activity. When printing large areas or a large edition, use the arm to avoid excess pressure on your back and avoid fatigue.

Be aware of other beds and equipment, and people around you while working. Keep areas around the bed clear and accessible.

Acrylic Inks

Acrylic inks are classed as a non-hazardous and can be cleaned up with water. Make sure you scrape off all the ink from your screen before you take it into the washout room to minimize the amount of ink/acrylic going down the drain.

There are washing up liquid and household cleaners for cleaning the print bed, worktop, and sink area. Once acrylic ink has hardened to a surface, it needs to be scraped off; this means there is a risk of it becoming a dust or powder and should not be inhaled. Wear a mask if this situation arises.

Do not eat or drink while handling inks and wash hands thoroughly before doing so.

Information on household cleaners can be found on the cleaning cupboard in the etching room and MSDS sheets in the office.

RELIEF PRINTMAKING

Woodcuts and linocuts

Woodcuts and linocuts are made by gouging out areas of a smooth surface with cutting tools. Standard inks (both oil and water-based) can be used to print the plates. Soft woods such as pine make ideal woodcut blocks. Heating the linoleum with the electric hotplate in the workshop makes cutting easier.

Cutting tools are very sharp and should be used correctly to avoid injury.

Always cut in a direction away from you, with your free hand on the side or behind the tool. Bench hooks are also provided in the studio for safer cutting.

Solvents, which are used during clean up, are skin irritants. Wear gloves and use them in the solvent room with the extraction fan on.

Sawdust residue from carving should be cleaned up after working and a dust mask worn.

METAL TYPE

- Clean your working area, including any type used before returning it to the type cases and clean up any spillages immediately.
- Always wash your hands after handling the type.
- The metal type in the letterpress workshop is designed for printing only. It is not strong enough to withstand embossing or any other heavy-handed pressure technique or hot foil presses.
- These heavier processes cause damage to the type. Brass type is designed for embossing.
- Type should be handled with care and hands always washed after working with type.
- Take great care when pulling type cases out.
- If you need to reach type at the back of a case, pull out the type case below it to offer additional support.
- Keep yourself safe when working with metal type. The studio stocks mostly Lead type so first and foremost are basic shop hygiene practices: don't eat, drink, or smoke while you're working to avoid lead poisoning. Wash your hands well before eating and wear an apron and please do not place any type in or around your mouth area.

HEAT TRANSFER PRESS

This equipment gets very hot. Wear safety glasses and heat resistant gloves. Tie long hair back and avoid wearing loose sleeves or jewelry.

Switch off the power when you have finished. If the press was used at a high temperature make sure it has cooled down before leaving it.

Warn other members or studio users that it is hot.

STORAGE

- Apply a proper lifting technique when moving your ink box or any heavy object by bending your hips and knees to squat down to your load. Keep it close to your body and straighten your legs to lift.
- Always use the ladder provided to access your ink box if located in the middle and higher level of the shelf.
- Always ask a technician for help to get your inks down if you feel you cannot manage it.
- Lower screens carefully with both hands and be mindful of others around you.

Health and Safety data, MSDS and COSHH sheets as well as risk assessment are in a file in the office and always available.

Always ask if you are not sure about any process.

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There are no hazards due to inhalation of the pigment unless ink is allowed to dry on surfaces where it can eventually form a powder.

When cleaning up oil-based ink using solvents you must be aware that solvents are highly toxic by inhalation and moderately toxic by repeated skin contact, causing dermatitis. Do not wash your hands with solvents; appropriate gloves should be worn to avoid skin contact and must be used outside when cleaning plates. Use the solvent cleaning up room. Solvent-soaked rags must be placed in the metal bin marked **Rags**. Do not put solvents down the sinks. Vegetable oil is provided by the studio and should be used with an ink scraper to clean the inking slabs.

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STOP OUTS AND VARNISHES

Use these in a well-ventilated area as some of them contain toxic ingredients (for example Alcohol, Resin, Asphaltum) or more information see the MSDS.

White Spirit & Meths

These should only be used in the designated area and with the extraction fan running. Always wear gloves, there are masks provided, it is advised that they are worn especially if using for prolonged period. After use return all materials to the flammable liquids cupboard and dispose of any rags or empty containers in the metal bin provided. More information is available in the H&S in the SPS office.

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remove all contaminated clothing. Seek medical attention if severe or if irritation continues. More information is available in the H&S in the SPS office.

Keep baths covered after use.

Aquatint Resin

Aquatint resin is harmful when inhaled. Masks of category P1 or above must be worn when in the designated area. These masks are provided. All windows and doors in the area must be kept closed to avoid air born resin, and the extraction fan put on when using the room. More information is available in the H&S located in the SPS office. When using the hotplate or hot air gun to melt Aquatint, please use appropriately and take caution as the heated element and plate can get very hot. Turn off immediately after use and allow cooling before handling.

Unplug equipment when finished.

Presses

The presses are all handset and operated. Tie back any long hair and remove any hanging, jewellery, scarves, ties, headphones, etc. that might get caught. Be aware of who is around you and where the press is going to end up. When operating the press be aware of your own posture and adopt a position comfortable for you. Never twist, lift, or hold heavy objects when operating the presses. Do not raise rollers too high to avoid the bed sliding out. Always set up and remove blankets, with the bed central to the press.

Hotplates

Please make sure that hotplates are turned off after use and that they are left free of ink. Inking areas next to the hotplates should be cleaned up after using with vegetable oil followed by kitchen cleaner or warm soapy water.

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Any water spillage needs to be mopped up and caution taken until dry.

Exposing a Screen

When exposing the screen make sure that the door is closed and that no one will enter the room until the unit has cut itself off. Ultraviolet light can damage your eyes; do not look directly into the light.

Using the vacuum bed (also known as hand bench or screenprinting press)

When using the vacuum bed be aware that it comprises of heavy metal parts and may have handles, clamps or levers that stick out. Adjustments to the bed can be made to ensure it is correctly set for the individuals printing needs. Make sure you check the bed before printing. When printing, make sure that you brace your body firmly to avoid backache. This can be done by tightening your stomach and keeping your elbows close to your body, which then takes the stress off your back. Screenprinting is a whole-body activity. When printing large areas or a large edition, use the arm to avoid excess pressure on your back and fatigue.

Be aware of other beds and equipment, and people around you while working. Keep areas around the bed clear and accessible.

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Using the pressure washer

- Wash off any chemicals with the hand spray gun before blasting screens to avoid them becoming airborne.
- Always wear ear defenders and a mask. Goggles are a good idea especially sensitive to chemicals used.
- Switch on unit where indicated.
- Pick up the lance carefully and do not press trigger until the lance is pointing at the wash-out booth.
- Turn off the unit when finished and spray into washout booth to release pressure.
- Put lance back in holder.

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- Always cut in a direction away from you, with your free hand on the side or behind the tool.
- Solvents, which are used during clean up, are skin irritants. Wear gloves and use them in the solvent room with the extraction fan on.
- Sawdust residue from carving should be cleaned up after working and a dust mask worn.

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- Keep yourself safe when working with metal type. First and foremost are basic shop hygiene practices: don't eat, drink, or smoke while you're working to avoid lead poisoning. Wash your hands well before eating and wear an apron.

HEAT TRANSFER PRESS

- This equipment gets very hot. Wear safety glasses and heat resistant gloves. Tie long hair back and avoid wearing loose sleeves or jewelry.
- Switch off the power when you have finished. If the press was used at a high temperature make sure it has cooled down before leaving it.
- Warn other members or studio users that it is hot.

STORAGE

- Apply a proper lifting technique when moving your ink box or any heavy object by bending your hips and knees to squat down to your load. Keep it close to your body and straighten your legs to lift.
- Always use the ladder provided to access your ink box if located in the middle and higher level of the shelf.
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