

Poplar Bluff Technical Career Center
Graphic Communications

Shop Safety

Shop Safety

In this unit you will:

- Learn vocabulary terms
- Learn shop safety rules
- Learn steps in maintaining safety and order in the shop
- Learn listed information on a Material Safety Data Sheet
- Learn the steps to take in case of an emergency

Vocabulary Terms

- Solvents
- Combustibles
- Personal Protective Equipment
- Hazard
- Material Data Safety Sheet (MSDS)
- Occupational Safety and Health Administration (OSHA)
- Ergonomics
- Lockout Device
- Machine Guards

The definitions to these terms are provided in your in your information sheet handout.

Shop Safety Rules

In order to have a safe shop you must abide by the shop safety rules listed below:

- Conduct yourself in a manner conducive to safe shop practices.
- Do not use any equipment until you understand how to use it.
- Operate any presses or electrically powered equipment only after obtaining the approval of your instructor.
- **Never** walk away from equipment that is running.
- Always keep your hands away from a machine's moving parts.
- Use the correct tools and equipment when doing a job.
- Limit the operation of the paper cutter, paper drill, and stitcher to one person at a time.
- Tie back all long hair prior to operating any press or power equipment.

Shop Safety Rules Continued...

- Remove ties, scarves, loose clothing, rings, and other jewelry before operating any press or power equipment.
- **Do not** sit or lean on light tables.
- Avoid touching or looking directly at light sources.
- Wear eye protection in areas where flying objects and splashing solutions are possible.
- **Do not** touch heat sources with hands or other body parts.
- Wear hearing protection when subjected to continuous loud noise.
- Wash hands and arms with soap and water frequently to help prevent skin irritation from inks and solvents.
- **Do not** engage in horseplay, scuffling, or practical joking in the classroom or shop.
- Use the "buddy system" when working in the graphics laboratory.

Maintaining Safety and order in the shop

In order to maintain safety and order in the shop you must abide by the following guidelines listed below.

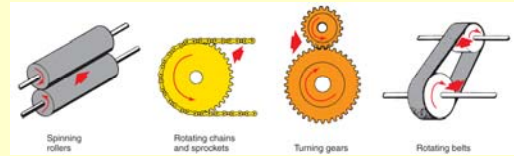
- **Report any unsafe condition in the shop immediately.**
- **Arrange all machinery and equipment to permit safe and efficient operation.**
- **Keep materials and supplies safely stacked and stored.**
- **Keep all tools and accessories in cabinets, drawers or tool racks.**
- **Dispose of or store all combustible material in safe containers.**
- **Keep all floors clean and free of debris at all time.**
- **Check that adequate housekeeping equipment and cleaning materials are on hand to ensure that maximum cleaning efficiency can be maintained.**
- **Participate in daily cleanup periods.**

Machine Guards

- Machine Guards protect body parts from being electrocuted, cut, squashed, or hit by flying fragments, that happen with equipment hazards
- Equipment hazards:
 - Spinning Rollers
 - Rotating chains & sprockets
 - Turning Gears
 - Rotating Belts

Machine Hazards

- Machine Hazards



Tag out

- Tagout device – a prominent warning, such as a tag fastened to a machine.
- Use a “tagout” tag if a machine is broken.

Safe Lifting

- Make sure you have a clear path for carrying things
- Check object's weight
- Request help
- Keep back straight
- Lift with your knees
- Keep objects close to body
- Tighten stomach
- Put things on floor carefully

Fire Prevention

- Combustible = Flammable
- Solvent – chemical that dissolves other substance
- To prevent fire –
 - Never sit solvent soaked rags on heat sources
 - Report leaking solvent containers
 - Put rags in fire safe container

Material Safety Data Sheet

When working with chemicals you need to know certain things about chemicals when emergencies come up.

Below you will find types of information found on a material safety data sheet. All chemical products have this information available upon request if it is not shipped with your order.

- Chemical name
- Hazardous ingredients/chemical identity.
- Physical characteristics
- Fire and explosion data
- Reactivity
- Health hazards
- Usage, handling, and storage
- Special protection and precautions

Ergonomics

In order to avoid back, neck, and knee injuries, and carpal tunnel syndrome, be sure to watch your posture at your desk:

Sit and work at computer with:

- thighs horizontal
- lower legs vertical
- feet flat on floor
- wrists flat
- monitor not too close or far away from face – your neck should be straight.

Emergency

Here are the proper steps to take in case of an emergency:

1. Turn off power if power is involved
2. Report to instructor
3. Administer first aid, if qualified and possible
4. If chemicals are involved fill out MSDS sheet
5. Report to administrator
6. Call nurse or take injured person to nurse
7. Notify parents
8. Instructor fill out necessary accident forms.

Credits:

References:

- Texas Trade & Industrial Education website
- Book – Graphic Communications
- Instructor – Regina Gossett, Poplar Bluff Technical Career Center