

Standard Operating Procedure (SOP): Hazardous Material Storage and Handling

This SOP provides comprehensive guidelines for the **hazardous material storage and handling** process, covering proper labeling, storage conditions, handling procedures, personal protective equipment (PPE) requirements, spill prevention and response, and employee training. The aim is to minimize risks associated with hazardous materials, protect worker health and safety, prevent environmental contamination, and ensure regulatory compliance through careful management and control of hazardous substances.

1. Purpose

To outline safe and effective procedures for storage and handling of hazardous materials, thereby minimizing risks to personnel, facilities, and the environment.

2. Scope

This SOP applies to all employees, contractors, and visitors who interact with or are responsible for hazardous materials on site.

3. Definitions

Term	Definition
Hazardous Material	Any substance or material that poses a physical or health hazard, as defined by local, state, or federal regulations.
PPE	Personal Protective Equipment-such as gloves, goggles, respirators, and protective clothing-required for safe handling.
SDS	Safety Data Sheet detailing the properties, hazards, and safe handling of a material.

4. Responsibilities

- **Supervisors:** Ensure compliance with this SOP and regulatory requirements.
- **Employees:** Follow all procedures and report incidents or unsafe conditions.
- **Safety Officer:** Provide training and conduct audits as required.

5. Procedure

5.1 Hazard Identification and Labeling

- All hazardous materials must be properly identified and labeled as per regulatory standards (e.g., GHS, OSHA).
- Labels must remain legible and include the substance name, hazard warnings, and emergency information.
- Refer to the manufacturer's SDS for specific labeling requirements.

5.2 Storage Conditions

- Store chemicals in designated, ventilated areas away from incompatible substances.
- Maintain segregation by hazard class (e.g., acids separate from bases).
- Use spill trays, secondary containment, and appropriate shelving as necessary.
- Keep containers closed when not in use.

5.3 Handling Procedures

- Review the SDS and wear required PPE before handling any material.
- Use mechanical aids and safe lifting techniques for heavy or bulky containers.
- Do not eat, drink, or smoke in hazardous material storage and handling areas.
- Follow instructions for safe transfer, mixing, or decanting of materials.

5.4 Personal Protective Equipment (PPE)

- Required PPE shall be specified by the SDS and task performed (e.g., gloves, goggles, lab coats, respirators).
- Inspect PPE before each use and replace damaged items immediately.
- Follow established PPE donning and doffing procedures.

5.5 Spill Prevention and Response

- Store spill kits nearby and make them accessible to all personnel.
- Train employees in spill response and use of cleanup materials.
- In the event of a spill, follow the emergency response plan and notify the Safety Officer.
- Document all spills, exposures, and corrective actions taken.

5.6 Employee Training

- All personnel must receive initial and annual refresher training on hazardous material storage and handling.
- Training shall include hazard communication, use of PPE, emergency response, and safe work practices.
- Training records must be maintained as per regulatory requirements.

6. Documentation and Records

- Maintain up-to-date inventory of hazardous materials.
- Retain SDS for each hazardous substance accessible to employees.
- Document inspections, incidents, and corrective actions.

7. References

- OSHA Hazard Communication Standard (29 CFR 1910.1200)
- Globally Harmonized System of Classification and Labeling of Chemicals (GHS)
- Company Environmental Health & Safety Policies
- Applicable state and local hazardous materials regulations

8. Revision History

Version	Date	Description	Prepared by
1.0	2024-06-12	Initial SOP template issued	Safety Department