Hazard Communication &
The Globally Harmonized System

Safety Training Handout

Hazard Communication gives workers the right to know about the chemicals they handle. It’s recently been revised to align with the Globally Harmonized System (GHS) to improve hazcom quality and workplace safety.

What the GHS adds
- Harmonized classification criteria for health, physical and environmental chemical hazards
- Standardized label elements assigned to hazard classes and categories
- Signal words, pictograms and hazard and precautionary info to convey hazards to users
- Standard order of information for Safety Data Sheets

Hazcom Labels
- Every chemical container must be labeled
- If a container is missing a label, DON’T OPEN IT – report to a supervisor
- GHS requires these elements on each label:
  - Product identifier (code number/chemical name)
  - Supplier identification
  - Precautionary statements (phrases that describe recommended safety measures to minimize or prevent exposure or injury)
  - Hazard statement – assigned to each class and category to describe chemical dangers
  - Signal words – indicating level of hazard severity, either “danger” (more severe) or “warning” (less severe)
  - Pictograms – symbols that illustrate chemical hazards

Pictograms
- Health hazard
- Flame
- Exclamation mark
- Corrosion
- Exploding bomb
- Gas cylinder
- Flame & Crossbones
- Environment
**Safety Data Sheet (SDS)**

- How employees are informed about chemicals
- GHS requires these 16 specified sections:
  1. Identification
  2. Hazard identification
  3. Composition
  4. First-aid measures
  5. Firefighting measures
  6. Accidental release measures
  7. Handling and storage
  8. Exposure controls/personal protection
  9. Physical/chemical properties
  10. Stability/reactivity
  11. Toxicological information
  12. Ecological information (not enforced by OSHA)
  13. Disposal considerations (not enforced by OSHA)
  14. Transport information (not enforced by OSHA)
  15. Regulatory information (not enforced by OSHA)
  16. Other information (including date of preparation or last revision)

**Personal Protective Equipment (PPE)**

- PPE required varies depending on chemical properties and hazards
- Must be maintained and regularly inspected to ensure proper fit and good working condition
- Possible PPE includes:
  - Glasses, goggles and face shield for protection from splashes, sprays and mists
  - Gloves to protect from chemical hazards during handling
  - Respirators and dust masks when working in areas where hazardous vapors, fumes and/or dust are present
  - Foot, head and full-body protection (hazmat suits) to guard skin against contamination from corrosive materials