Safe Transfer and Labeling of Chemicals Safety Talk

Chemical labels are one of the most important safeguards in a manufacturing environment. When chemicals are transferred from their original supplier container into spray bottles, squeeze bottles, buckets, jugs, or process vessels, the risks of misidentification, improper handling, and unplanned exposure increase.

Studies in industrial safety show that a significant portion of chemical incidents involve improperly labeled or unlabeled secondary containers, often due to rushed transfers or unclear practices. These incidents can be reduced when employees use correct transfer techniques, apply compliant labeling immediately, and control spill risks during the process.

General Hazards of Chemical Transfer and Unlabeled Containers

- **Mistaken chemical identity** – Secondary containers without complete labeling can lead to the wrong material being used in a process, increasing the risk of incompatible reactions or unintentional exposure.
- **Improper selection of PPE** – Without clear hazard information, employees may underestimate required PPE, particularly for corrosive, flammable, or sensitizing chemicals.
- **Emergency response delays** – In spill or splash situations, response teams depend on accurate labels to determine appropriate containment and medical treatment procedures.
- **Cross-contamination** – Transferring chemicals into containers previously used for other materials, or those not designed for chemical storage, increases contamination and reaction hazards.
- **Spill and splash hazards** – Pouring or pumping chemicals from large or awkward containers into smaller ones can lead to spills, overflows, and unexpected contact with hazardous liquids.

Best Practices to Reduce the Risk of Injury

- **Using compatible secondary containers**
  Select containers made of materials compatible with the chemical, in accordance with SDS guidance, to prevent degradation, leaks, or pressure buildup.
- **Transferring chemicals using controlled techniques**
  Use funnels, pumps, or designated dispensing equipment to maintain stability and prevent splashing or overfilling. Maintain containers on stable surfaces and ensure adequate ventilation during transfer.
- **Applying GHS-compliant labeling immediately**
  Secondary containers intended for use beyond the immediate shift must be labeled at the time of transfer. Workplace labels should include:
    - The product identifier matching the SDS.
    - Applicable hazard pictograms.

    - Signal word, hazard statements, and key precautionary statements.
    - Any supplemental information required by site procedures.
- **Maintaining clear visibility of labels**
  Ensure labels remain readable, firmly attached, and free from chemical buildup. Replace faded or damaged labels before containers re-enter service.
- **Preventing spills during transfer**
  Use drip trays, absorbent materials, and designated transfer areas when handling liquids. Keep spill response supplies readily accessible and promptly clean minor drips to prevent slip and exposure hazards.
- **Storing secondary containers correctly**
  Place labeled containers in their designated storage locations, away from incompatible materials, ignition sources, or high-traffic areas. Keep lids closed when not actively dispensing.
- **Documenting updates and following internal procedures**
  Log chemical transfers when required by site protocols, ensuring consistency with OSHA Hazard Communication requirements and internal chemical management systems.

Summary

Safe chemical transfer and labeling practices reduce the risk of misidentification, incompatible reactions, unplanned releases, and hazardous exposures. Using compatible containers, applying complete GHS-compliant labels immediately, and controlling spills are fundamental steps in maintaining chemical safety. Consistent practices help reinforce a reliable hazard communication system that supports daily operations and emergency response.

Discussion Points

1. *What additional hazards may arise during the transfer of chemicals into secondary containers?*
2. *What best practices can employees apply to ensure secondary container labels remain accurate and readable over time?*