

CHEMICAL HANDLING AND APPLICATION SAFETY



FOR TODAY'S FLOORING BUSINESS

Chemicals are an everyday part of the floor professional's life and knowing how to use and store them safely is an important part of the job. It is the one component that is often overlooked but can be vitally important to the health and safety of you, your employees, and your customers.

In this video, we will break down the basic categories that relate to using and applying of different chemicals during the course of a floor professionals' day. Here is an overview of the topics we will be discussing:

- the creation of a chemical safety plan
- the location of SDS and other educational literature
- personal protective equipment & how to use each piece properly
- how to handle and store chemicals properly to avoid exposure or spilling
- Procedures for cleaning up a spill
- how to handle waste materials

CREATING A CHEMICAL SAFETY PLAN

Step one in the process is making a work manual that outlines the procedures necessary for this safety program. Additional information that is specific to your business should be added to ensure that all possible scenarios are covered. This plan will be essential to the business with employees and the single owner operator alike, since it will put in place a system that keeps workers safe and helps protect your business from additional liability. If storing chemicals within your facility, it is recommended that you consult your local fire department to ensure you are compliant with any local codes.

LOCATION OF SAFETY DATA SHEETS



Keeping proper records of the chemicals that are stored in your facility and on each vehicle is an important part of the overall plan. In the U.S., having SDS sheets for every chemical on the work van and in your facility is the law.

What is an SDS sheet?

A safety Data Sheet is provided by the manufacturer of a chemical product that you would use in your profession. In the U.S., the information follows the format adopted by GHS (global harmonization system), an international agreement by countries to standardize and identify key chemical information on each product. The data on an SDS is there to inform the applicator or consumer of any hazards or cautions to be aware of when using the product. Any cautionary statements are provided near the top of the document, accompanied with the matching symbols and a symbol word. This information is also required to be displayed on the product label as well in readable type.

Example:



Signal Word: Danger

Cautionary statement: Causes Severe Burns And Eye Damage

Further in the SDS document, it will also provide actions to take in the case of spill, exposure, ingestion, inhalation, or other event. The document also provides a phone number to an emergency control service to further help in there is an accident.

Why do I need to keep SDS' in my work vehicles and place of business?

OSHA (Occupation Safety and Health Administration) requires that SDSs be readily available to all employees for potentially harmful substances handled in the workplace under the Hazard Communication regulation.

SDS sheet are vitally important for today's flooring professional given the growing laws and customer concerns about less harmful products being used in their homes. With the proper training, and the understanding of the information on an SDS sheet, he or she can confidently use the chemicals needed to complete the work with safety.

It is recommended that each work vehicle contains a binder which holds each products SDS sheet and a tech data sheet if possible. Quarterly review would be advisable to ensure that the binders are up to date with any the products being used by the professional.

Some of the best companies even provide the customer with a written summary of the products being used in their home. This demonstrates to the customer the level of professionalism of your company and the care you have for their safety.



PERSONAL PROTECTION EQUIPMENT



Using chemicals safely is important, and it starts with protecting yourself. There are some basic items that each professional should have and use when working with chemicals on the job. Here is a list of the most important items;

- **Latex gloves**
 - Use when mixing chemicals or applying sealers to prevent over exposure
- **Respirator**
 - Use when apply strong cleaners such as strippers or sealers in enclosed areas
- **Eye protection**
 - Use when mixing chemicals or spraying chemicals in an enclosed area
- **Propper footwear**
 - Require hardened toe boots to protect from possible injury from heavy equipment. Non-slip over shoes are recommended to be used when the contractor is applying slippery solutions such as cleaners that could cause a fall.
- **Floor fans**
 - An important item to help move air flow when using heavy strippers or cleaners, or applying sealers
- **Yellow caution sign**
 - Contractors are usually performing services within a customer's home, often times while they are there. Caution signs help remind the customer and the contractor of any potential slip concerns where the work is being performed.
- **Hand Soap**
 - Contractor grade hand soap as a backup is helpful to clean up the professional's hands or arms after mixing or applying any chemicals, even though they regularly use gloves. It is a good idea in case of a possible accidental splash.

There may be other items that would be advisable to consider for yourself and/or your employees. Please investigate your industry thoroughly. Consult with your chemical and equipment manufacturers, your distributors and any trade associations that may be of further help in maintaining a safe working environment.

PROPPER HANDLING AND STORAGE OF CHEMICALS

How a professional utilizes and stores the chemicals in their profession is just as important as knowing how to apply them.

- Dilution procedures
 - Always wear gloves and eye protection when mixing chemicals
 - Always add chemicals to water, never add water to a chemical concentrate. If water is added second in order, a splash that displaces the chemical concentrate can occur and result in skin or eye injury.
- Spill avoidance and control
 - Mix chemicals in a safe area whenever possible, away from areas that could be damaged by a spill.
 - Place mixing bucket in a spill containing tray
 - Wipe container thoroughly before bringing into customers home
 - When finished, seal any unused diluted clean in properly marked, chemical safe containers
- Transporting chemicals
 - Make sure all containers are tightly sealed and secured to avoid falling over during driving (i.e. plastic milk crated)
 - Do not put incompatible chemicals near each other (i.e. acid and alkaline). Consult your product SDS sheets for any incompatibilities with other chemicals.
- Chemical Storage
 - Consult your product SDS sheets for specific storage instructions. General good practices are;



- Ensure containers are properly sealed and marked
- Store in a cool dry area, avoid excessive heat or cold
- Store incompatible chemicals away from each other
- Place chemicals on spill pallets in case of leak
- Do not store chemicals near and equipment that can cause a spark or flame
- Keep out of the reach of children at all times
- Keep absorbent material nearby in warehouse and on work vehicle to quickly contain any possible spill that might occur
- Post proper signs to alert others of any hazards

CLEANING AND CONTAINING SPILLS

When a spill occurs, containing and removing the spill safely is extremely important. Proper absorbents and neutralizers should be stored in the vehicle or near the area where chemicals are stored within the facility. Once contained and cleaned, be careful how those materials (i.e. rags, or absorbent media) are stored and disposed of. For example, rags that have absorbed a solvent or other potentially flammable material could later ignite if kept in a closed container for too long or bunched up into balls which can cause a spontaneous combustion even if there is no heat or flame source present. A business owner should consult the EPA directly to get direction on how to properly dispose the rags. The EPA recommends businesses keep two separate stacks of used rags and absorbent products: one for non-hazardous chemicals, and another one for hazardous chemicals.

For more information from the EPA on this subject, visit;

<https://www.epa.nsw.gov.au/licensing-and-regulation/licensing/environment-protection-licences/compliance-audit-program/chemical-storage-handling-and-spill-management>

Choose an absorbent material based upon the chemicals transported or stored, but an effective type to consider would be the “universal” type, which covers many different types of chemical spills. If larger amounts of chemicals are stored at a facility, spill pallets, and absorbent socks, usually 10” in length may also be prudent to consider. There are many companies who specialize in these products throughout the country who can also help you with your decisions.



TRAIN & REVIEW

Once you have identified all the elements necessary to keep you and your employees safe, it is required by law that you train each employee, manager, and owner on their roles in this process. Take the time to go through the information and emergency procedures thoroughly so that if there is ever an occurrence, you and your staff will be prepared. Hazardous communication is required by OSHA's Hazard Communication Standard (HCS), 29 CFR 1910.1200. There are 4 parts that employers are required to meet:

- Labeling : Employers must ensure that all hazardous chemical containers are **properly labeled**, tagged, or marked with either the appropriate shipping labels or information regarding the chemical's hazards.
- **Employers Must keep SDS on worksite**; available to employees and others
- An employer must create a **written hazard communication program**
- Employees must be **provided training** and information about all hazardous chemicals in their work area prior at the time they are assigned to a work area.

Review these protocols annually. Working together as a team, every person can help to ensure the health and safety of their fellow employees and the entire organization.