Inspection Checklist

Inspection Checklist - Sample Checklist for Chemical or Product Inventory

On this page

Why should a chemical or product inventory be done?

Performing a periodic inventory can have several benefits:

- Verify that hazardous products are being stored correctly and safely.
- Remove products that are expired or no longer used.
- Identify products that could be replaced with safer alternatives.
- Identify locations needed for emergency response procedures and the municipal fire plan.
- Comply with occupational health and safety (OHS) and environmental regulations.
- Meet integrated management system requirements (e.g., ISO, COR, or other auditing requirements).
- Collect usage and waste data for the annual National Pollutant Release Inventory (NPRI) and other jurisdictional toxic substance or emissions reports.
- During preparation, other items related to chemical safety can be inventoried, including safety data sheets (SDS), personal protective equipment (PPE), and emergency spill response supplies.
- Evaluate if the training provided to workers matches the products on site.

What are general steps to follow when conducting a chemical or product inventory?

Plan appropriately. When doing an inventory, it is useful to have a floor plan where to mark the areas where chemicals or products are used or stored. Set a path to follow so that there are no missed products or locations.

Ideally, the inventory should be conducted by a team of two persons (one can write and the other can handle the products if needed). Consider the specifics of the area you will be inspecting and wear the personal protection equipment (PPE) required in that area.

Before the inventory begins:

- Has a means of communication been established in case of a problem (e.g., exposure, spill, breakage, fire, etc.)?
- Are spill response materials available? Are they appropriate for the products expected to be found?
- Are safety data sheets (SDS) or manufacturer's safe use instructions (consumer products) available to review? Are they current for the products being purchased and used?
- Do team members know how to deal with any "unknown" products they may find?
- Have team members know and understood what to do if they find a potentially hazardous situation?
- Have team members been trained in how to use emergency equipment such as an eyewash station or deluge shower?
- Does the team have the necessary personal protective equipment (PPE) for the products being handled? Respirators, gloves, eye protection (glasses, goggles, face shields), clothing (aprons, coveralls), and foot protection (safety shoes, boots) made from appropriate chemical-resistant materials should be worn.

What should be done when conducting the inventory?

When conducting the inventory:

- Notify the supervisor or manager of the area where you are performing the inventory.
- Mark the areas where the products are stored and used.
- Check all areas for products that may be stored in places they are not supposed to be.
- Ensure the inventory team knows what situations to expect, how to identify when a situation may be an emergency, and what to do in an emergency.

- Wear appropriate PPE.
- Make sure the ventilation is functioning properly in storage areas or rooms before you enter.
- Make sure there are no sources of ignition (flames, pilot lights, etc.) present.
- Know how to contact emergency services in case you are exposed, or find a spill, leak, or damaged container.

What should not be done when conducting an inventory?

During the inventory:

- DO NOT handle the products unnecessarily.
- DO NOT remove products for disposal unless there is a process in place for storage and removal of hazardous wastes. Flag the product and have it removed safely and appropriately.
- DO NOT reorganize the containers, unless you find products that are improperly stored **and** they require immediate attention (e.g., flammables near an ignition source, incompatible materials stored near each other, etc.).
- DO NOT clean up a spill or leak if you are not trained to do so.

If you encounter a situation that needs to be addressed immediately, such as a spill, leak or the presence of ignition sources, follow the emergency notification protocol in your workplace.

What information should be recorded?

Your information needs will be specific to your workplace, but in general you need to record:

- Name and specific identification (e.g., the product code or CAS number*) of all chemicals, materials and products that are in the workplace including consumer products (such as cleaning products, lubricants and pest control products sold in retail stores)
- Amount, including the size and number of containers, amount remaining in the container, etc. Be as exact as you can.
- Location of products used in every place in your workplace.

- You may choose also to record:
  - Manufacturer/supplier name
  - Hazard Classification (flammable, corrosive, toxic, etc.)
  - Classification
  - Physical state (solid, liquid, gas under pressure, etc.)
- Any amount or type of waste that is present
- Situations where hazards are present, such as:
  - Containers that are not properly labelled (such as for WHMIS or consumer products)
  - Storage containers, areas, tanks, etc. that are in poor condition
  - Incompatible products being stored together
  - Expirerd products
  - Disconnected or damaged grounding wires
  - Inadequate spill containment (e.g., the spill containment pit, raised berm, or pallet has less available volume than the quantity of liquid product being stored there)
  - Poor housekeeping (cluttered storage, slip-trip-fall-risks).
- Availability of an SDS for each product.

*CAS stands for Chemical Abstracts Service, a service from the United States that assigns a unique number to each pure chemical. CAS numbers are used worldwide.

How is the inventory maintained?

An essential aspect of the inventory is its maintenance over time. Products must be entered or quantities be updated as the products arrive or are used. If there are several persons in charge of purchasing products, implement a communication or updating system so that all products are inventoried in a centralized system. This system will ensure that those in charge of hazard information are informed about the presence of the product. If the inventory database is digital and accessible to all workers, it can even be used to link directly to digital SDS files for easy reference.

New products may need to be evaluated for safety and environmental impacts before final approval or rejection. Obsolete or rejected products may still be present in the workplace pending safe disposal. The inventory form can be used to record a product's current status (under review, approved, rejected, obsolete, waste, etc.) and flag it for further action.

What is an example of a chemical or product inventory form?

Determine the level of detail needed for your workplace. Customize this form accordingly.

Chemical or Product Inventory Form - Example							
Inventory Date (MM/DD/YYYY) and Time (start – end):							
Location or Building Name:							
Inventory completed by:							
Chemical or Product Name and Manufacturer	**CAS #**	**Quantity (number, volume, etc.)**	**Use / Process**	**Storage Location**	**SDS on file?**	**Status**	**Other Comments**

(Adapted From: Implementing a Chemical Safety Program, CCOHS

Fact sheet last revised: 2022-10-26

Disclaimer

Although every effort is made to ensure the accuracy, currency and completeness of the information, CCOHS does not guarantee, warrant, represent or undertake that the information provided is correct, accurate or current. CCOHS is not liable for any loss, claim, or demand arising directly or indirectly from any use or reliance upon the information.