

# Working Safely with Chemicals Metting Kit



## WHAT'S AT STAKE

Chemicals come in various forms and can affect those exposed in different ways. A chemical can take the form of a mist, vapor, liquid, dust, fume, or gas. The type of chemical, the way it is used, and the form that it takes determine its effect and what should be done to avoid harmful exposure.

## WHAT'S THE DANGER

### DANGERS OF WORKING WITH CHEMICALS. Common types.

- Toxic – Causes sickness or death.
- Corrosive – Causes irritation or burns to the skin or eyes on contact.
- Flammable – Easily catches fire.
- Reactive – Could explode under certain circumstances.
- Radioactive – Causes burns to the skin on contact or in some cases cancer.

### The Risks of Working with Chemicals. Four ways chemicals cause bodily harm.

- Contact – with skin or eyes
- Ingestion – in food or beverages or smoking materials that become contaminated.
- Breathing – inhaling gas substances
- Injection – by cutting or sticking yourself with a contaminated instrument.

### Common Hazardous Substances in The Workplace:

- acids
- caustic substances
- disinfectants
- glues
- paint
- pesticides
- petroleum products
- solvents.
- heavy metals, including mercury, lead, cadmium, and aluminum.

## Possible Health Side Effects of Exposure to Hazardous Substances

- poisoning
- nausea and vomiting
- headache
- skin rashes, such as dermatitis
- chemical burns
- birth defects
- disorders of the lung, or liver
- nervous system disorders.

## HOW TO PROTECT YOURSELF

### WORKER PROTOCOLS TO HANDLE CHEMICALS SAFELY

- Know what to do in an emergency. If there is a leak or spill, keep away from the area, unless you know what the chemical is and how to safely clean it up. Know where emergency protective equipment and supplies are kept and how to use them.
- Use appropriate protective clothing and equipment (glasses, aprons, boots, gloves, etc.) as required or as necessary.
- Maintain awareness, be cautious, and plan ahead. Perform a mental safety assessment to consider what could go wrong during the execution of your work task and then pay close attention to the task at hand.
- Follow your company's established work procedures and perform job duties in accordance with your training.
- If the clothing becomes contaminated by the chemical, shower or washes the skin areas exposed. Change and decontaminate clothing (or dispose of it if it is designed for single use).
- Do not take contaminated clothing home to be laundered because doing so could expose family members to the contaminant.
- When working with chemicals, always wash your hands thoroughly before eating. If necessary, shower and change clothes before going home.
- Never take food into the work area where chemicals are being used or stored.
- If work will be done in an area where there is a possibility of exposure to toxic substances, use a buddy system or establish an emergency communication system.
- Keep the workplace clean to reduce the risk of contamination. Where possible, wipe up and absorb the contaminant, using proper protective equipment as required. Clean up spills immediately and dispose of contaminated material properly.
- Read labels and the safety data sheet (SDS) to understand hazards and precautions before you start working.
- Always wear the required personal protective equipment (PPE). Inspect PPE carefully before use and replace it if too worn or damaged.
- Ensure all containers are labeled properly and appropriately for the material. Immediately report any damaged containers or illegible labels to your supervisor. Do not use the material if not contained or labeled properly.
- Do not use chemicals for anything other than their intended purpose.
- Do not handle contact lenses while handling materials. Consider that your hands may be contaminated after handling materials and always clean thoroughly with soap and water.

- Ensure materials are stored properly and know which materials cannot be stored together. Separate incompatible materials and store them in ventilated, dry, and cool areas.
- Clean up your workspace and surfaces at least once a shift to minimize contamination risks.
- know evacuation procedures, reporting procedures, and what to do in the case of a fire or spill and during a medical emergency where a co-worker or yourself may have become injured or exposed to chemicals.
- If you aren't sure about the appropriate way to handle a certain chemical, don't be afraid to ask your supervisor. It is better to ask to receive the correct guidance than to assume the wrong information when working with chemicals.

## **FINAL WORD**

The chemicals you use at work may include products you buy in your core business, in maintaining your equipment, or in general cleaning.