

Chemical exposure at hazardous levels usually occurs in one of three ways:

- Inhalation – Breathing in contaminated air in the form of gas, vapors, mist, dust, fumes, or smoke
- Ingestion – Swallowing chemicals via contaminated food or unwashed hands
- Skin Contact – Spilling or wiping chemicals directly onto skin, or into eyes

Chemical hazards and toxic substances pose a wide range of health hazards and physical hazards.

- **Skin Irritants** cause the skin to become cracked, dry, or inflamed or can burn the skin.
- **Corrosives** have the ability to destroy body tissue, which could be anything they come in contact with like the skin, eyes, respiratory system, or digestive tract.
- **Carcinogens** may cause cancer depending on many factors like exposure time and duration.
- **Respiratory Tract Irritants** are substances that can cause inflammation when inhaled and can lead to symptoms like coughing and wheezing.
- **Respiratory Sensitizers** can trigger a permanent, allergic reaction in the respiratory system. Once this happens, further exposure to the same chemical will produce the allergic response.
- **Flammables and Combustibles** can cause fires or explosions.
- **Reactive Chemicals** have the potential to explode, ignite spontaneously, release toxic fumes, or otherwise react dangerously upon contact with air, water, or other incompatible substance.



- Read the container label before using any chemical product. Understand the warnings and follow the instructions for use.
- Refer to the safety data sheet (SDS) for additional information on any chemical used at work. The SDS will communicate proper handling and storage procedures, emergency response actions, and first aid guidance.
- Always wear recommended personal protective equipment (PPE) when using chemicals.
- Never mix cleaning products, especially products that contain bleach and ammonia.
- Never use chemicals at full strength if the instructions say to dilute it. Always follow the exact instructions on the label to correctly dilute chemicals.
- Only use chemicals in work areas that are well-ventilated and have good air distribution or exhaust systems.
- Store chemicals in their original containers in a cool, dry place, or in a storage location advised on the label or SDS. Keep chemical containers closed when they are not in use.

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