TOOLBOX TALKS

Topic: Chemical Safety

9 Questions to Ask Before Working With or Near Chemicals

No matter where you work or what you do, it is very likely that you are working near or with hazardous chemicals. They're very common. Some hazardous chemicals are used periodically in small quantities, while others are used daily in large doses. Their uses are numerous, as are the potential dangers they pose to your health and safety.

Exposure to hazardous chemicals may result in anything from damage to your central nervous system to skin burns to respiratory problems. Other possibilities include fires, explosions or chemical reactions that could endanger people far from your workplace.

Examples

Four workers in the hospitality industry required immediate medical attention after being exposed to chlorine gas when a co-worker mistakenly mixed muriatic acid with chlorine pool stabilizer.

In another workplace, a worker left a cart he was transporting unattended. On the cart were containers of chlorine bleach and citric acid powder. When a forklift struck the cart, the containers ruptured and their contents spilled onto the floor, releasing chlorine gas into the atmosphere.

In a different incident, a technician was stripping the surface of a bathtub for refinishing. Unfortunately, she was working in a small room without a respirator or even ventilation. She died from inhalation exposure to methylene chloride and methanol vapors.

Arm yourself with knowledge

When working with or near any chemicals, your best protection is knowledge. Your three primary sources of knowledge are the product's label (never use any substance that is not properly labeled), the product's material safety data sheet (MSDS), and your training. You must be taught about hazardous substances in general, and be trained specifically on the safe handling procedures for the materials you work with.

Before handling any chemicals, first learn the answers to these questions:

1. Is there a less hazardous substance that can be used instead?
2. What are the hazards associated with the material? Remember that some products have several hazards. A chemical that is poisonous may also be flammable.
3. What are the proper safe handling procedures for this substance?
4. Is there adequate ventilation in the area you will be working in?
5. What are the safe storage procedures for the toxic materials you are working with?
6. What are the proper disposal procedures for the substance?

7. What personal protective equipment (PPE) is required for safe handling of the material?
8. Is there a proper way to put on and take off the PPE to reduce the risk of exposure
9. What are the emergency procedures for the product?

Conclusion

Before working with any hazardous substances, be sure you have all the information you need. Take the time to read the labels and familiarize yourself with the MSDS. If you have not received proper training for the materials you are working with, or you are not clear with any aspect of that training, talk to your supervisor right away.

Quiz Questions

1. Safe handling procedures are the same for all chemicals.
True or False

2. Hazardous chemicals are rare and only found in a small percentage of workplaces.
True or False

3. To learn about safe handling procedures for a chemical, you must receive training, read the product's label, and read the product's _____.

4. When a product's label has been removed that means it has been determined safe to use by your supervisor.
True or False

5. Safe storage procedures are the same for all chemicals.

Answers:

1 False, 2 False, 3 material safety data sheet (MSDS), 4 False, 5 False