

Safety meeting blueprint

✓ Meeting Topic: Chemical safety

✓ Today's Date: _____

✓ Attendee Signatures:

Most of us would probably agree that some of the chemicals used in our workplace can be hazardous, but how much danger do these substances represent?

A lot. Consider: Exposure to chemicals is one of the five most common causes of workplace fatalities in the U.S., according to the Bureau of Labor Statistics. In fact, chemical exposure accounts for about 10% of worker deaths.

One of the best ways to reduce the chances of injuries when handling chemicals is to think of it as a three-step process. First, identify the substance. Next, handle the chemical properly. Third, use safe storage techniques.

Identification

Before working with chemicals, double-check that first aid kits and cleaning materials are nearby for easy access in case of an emergency or a chemical spill.

To identify hazardous chemicals, determine which type of substance you're

working with by looking at the label and reading the chemical's safety data sheet (SDS). If you don't see a legible label on the container, don't use the substance, and let a supervisor know.

Keep in mind that your substance could be:

- flammable, e.g., spray adhesives
- corrosive, e.g., acetic acids
- explosive or an oxidizer, e.g., organic peroxides
- toxic, e.g., PCBs
- an irritant, e.g., powdered substances
- environmental, e.g., oils
- a compressed gas, e.g., compressed hydrogen

Handling

Also be aware that chemical exposure can result from inhalation, ingestion, or absorption. That's why you want to put on the correct protective gear.

Consider wearing nitrile gloves and a face mask. Otherwise, the protective clothing you choose will depend on the chemical you're working with. Refer to the substance's SDS for more specific information about

which safety gear to wear.

Once your preparation is complete, you're ready to handle the chemical. You might want to use a chemical fume hood to ensure the area remains well-ventilated. And never mix any chemicals unless you know it's OK to do so.

Storage

After you're done using the chemical, store it properly.

(Can anyone identify chemical storage areas in our facility that are safe?)

Place chemicals in a cool, dry area that's well-ventilated and away from heat sources.

In addition, make sure the chemical is kept in its original packaging.

Also, never store chemical containers higher than eye level.

Finally, avoid storing incompatible substances together. For example, don't store mercury with acetylene.

Thanks for your attention. And remember, let's stay safe out there!

(See next page for test)

Safety meeting blueprint: Test your knowledge

Meeting Topic: Chemical safety

<p>1. It's best to store chemicals in areas that are</p> <p>a. Hot, wet and poorly ventilated</p> <p>b. Cool, dry and well-ventilated</p> <p>c. Hot, dry and well-ventilated</p> <p>d. Cool, wet and poorly ventilated</p>	<p>deaths on the job?</p> <p>a. 1%</p> <p>b. 5%</p> <p>c. 10%</p> <p>d. 50%</p>	<p>on</p> <p>a. A short-sleeved shirt</p> <p>b. A face mask</p> <p>c. Open-toed shoes</p> <p>d. None of the above</p>	<p>b. Spray adhesives</p> <p>c. Organic peroxides</p> <p>d. Powdered substances</p>
<p>2. What's the best way to identify the chemical you're using?</p> <p>a. Smell the substance</p> <p>b. Look at the color of its container</p> <p>c. Read the label</p> <p>d. None of the above</p>	<p>4. You should never store a chemical container higher than eye level. True or False?</p>	<p>7. What's the three-step process for staying safe while using a chemical?</p> <p>a. Identification, handling, storage</p> <p>b. Mixing, contamination, disposal</p> <p>c. Labeling, usage, recycling</p> <p>d. None of the above</p>	<p>10. Make sure chemicals are stored away from</p> <p>a. Heat sources</p> <p>b. Cleaning materials</p> <p>c. First aid kits</p> <p>d. None of the above</p>
<p>3. According to the Bureau of Labor Statistics, chemical exposures account for what percentage of worker</p>	<p>5. If you don't have the correct label for a chemical container, you should</p> <p>a. Mix the correct chemical into the container</p> <p>b. Let another coworker deal with it later</p> <p>c. Talk to a supervisor</p> <p>d. None of the above</p>	<p>8. Incompatible substances can safely be stored as long as they're away from heat sources. True or False?</p>	<p>11. Chemical exposure can result from</p> <p>a. Inhalation</p> <p>b. Ingestion</p> <p>c. Absorption</p> <p>d. All of the above</p>
<p>6. In order to stay safe before working with chemicals, you should put</p>	<p>9. Which of the following are flammable substances?</p> <p>a. Acetic acids</p>	<p>12. Which of the following are corrosive substances?</p> <p>a. PCBs</p> <p>b. Oils</p> <p>c. Spray adhesives</p> <p>d. Acetic acids</p>	

Test your knowledge: The answers

1. b	1. b. Spray adhesives
2. c	2. c. Organic peroxides
3. c	3. c. Read the label
4. True. Keep in mind that	4. True. Keep in mind that storage of chemical containers below eye level lessens the chance of damage to the eyes or the skin. Consider what might happen if any chemicals in an overhead container accidentally spilled on you - it wouldn't be a pretty sight.
5. c	5. c. Talk to a supervisor
6. b	6. b. Ingestion
7. a	7. a. Identification, handling, storage
8. False. Don't store	8. False. Don't store incompatible substances together. Otherwise, a toxic reaction, such as an explosion, could occur.
9. b	9. b. Let another coworker deal with it later
10. a	10. a. Heat sources
11. d	11. d. All of the above
12. d	12. d. Acetic acids