
Personal Protective Equipment (PPE) Activity

Participant Guide

Introduction

Manufacturing microsystems involves working with hazardous materials. Anyone who works with hazardous materials must understand the personal and environmental hazards involved with these materials, as well as the proper personal protection that must be employed. This activity will exercise your knowledge of the personal protective equipment (PPE) necessary to work with these hazardous materials.

Description and Estimated Time to Complete

This activity provides

- A crossword puzzle which utilizes your knowledge of PPE
- Post-activity questions pertaining to PPE and its correct usage

Allow at least 15 minutes to complete the crossword puzzle.

Allow 10 minutes to complete the Post-Activity questions.

Activity Objectives and Outcomes

Activity Objectives

- Identify the types of PPE used for various situations

Activity Outcomes

After the completion of this activity, you will have strengthened your knowledge of the PPE required when working with the hazardous materials involved in microsystems manufacturing.

Dependencies

It would be helpful to review the following SCME units:

- PPE PK – This unit will be particularly helpful when answering the post-activity questions.
- Hazardous Materials I PK
- Hazardous Materials II PK

Supplies

- A printout of the crossword puzzle
- Pencil
- The Post-activity Questions

What Do You Know about PPE?

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PPE Crossword Puzzle

ACROSS

2. Acid gloves are usually made of this type of composite material
4. What kind of hazard may cause acute or chronic health effects?
5. Hazard that sometimes contains both gases and dusts
7. Before wearing acid or solvent gloves you should check for these
9. A _____ Air respirator uses a tank to supply outside air
10. Chemical resistant boots are worn to protect these
12. Cannot be worn on the eyes when in a cleanroom
14. _____ protective equipment
16. This type of glove does not protect from acids or solvents

DOWN

1. Which route of entry may cause a skin irritation?
2. A type of PPE designed to protect the respiratory system from inhalation of atmospheric hazards
3. Feet , hands, eyes, face, respiratory system, and _____
6. This shield must be used to protect the face when working with acids or solvents
8. An acid apron should be worn when using acids and _____
9. This check must be done before using a respirator
11. Acid gloves should be disposed in the acid _____
13. This organization has established a PPE standard
15. Solvent gloves can protect from this form of hazardous material

Post-Activity Questions

1. Name the 6 parts of the body that PPE is designed to protect against hazardous materials.
2. What 2 types of special gloves can be worn as PPE when working with hazardous materials?
3. Name the two types of respirators used to protect the respiratory system when working with PPE.
4. Name three articles of PPE that should be worn when handling acids.

Summary

Manufacturing microsystems involves hazardous materials. When working with these materials it is essential to understand the dangers involved and the equipment needed to provide the proper personal protection.

References

- MSDS Hyperglossary - <http://www.ilpi.com/msds/ref/>
- OSHA PPE Training - <http://www.free-training.com/osha/ppe/ppemenu.htm>

Disclaimer

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