

BOARD OF FIREFIGHTING PERSONNEL  
STANDARDS AND EDUCATION

Hazardous Material Technician Sample Test



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Version 0

**Hazmat Technician**

1. NFPA 472, Standard for Professional Competence of Responders to Hazardous Materials Incidents, 2008 Edition
2. Fire Protection Publications, Hazardous Materials: Managing the Incident, 2nd Edition, 5th Printing
3. ERG, Emergency Response Guidebook, 2012 Edition

1. A halogenated hydrocarbon may contain the following elements: carbon, hydrogen, and \_\_\_\_\_.
  - A. chlorine.
  - B. bromine.
  - C. fluorine.
  - D. all of the above are correct.
  
2. Technicians who travel down range to gather information are called the:
  - A. reconnaissance entry team.
  - B. information team.
  - C. decontamination team.
  - D. resource team.
  
3. An intermodel tank car consists of seamless steel cylinders from nine (9) to 48 inches with fittings at one end is a \_\_\_\_\_ car.
  - A. nonpressurized tank
  - B. flammable liquid tank
  - C. tube module
  - D. low-pressure tank
  
4. Which of the following equipment is not normally part of a sample collection kit?
  - A. Bung wrench
  - B. paper cup
  - C. coliwasa
  - D. nonsparking sample pole
  
5. Given an incident involving anhydrous ammonia, the decontamination of crew members through the use of water and soap is known as:
  - A. dilution.
  - B. adsorption.
  - C. absorption.
  - D. neutralization.
  
6. Operating filaments of the Combustible Gas Indicator (CGI) can be damaged by brief exposure to:
  - A. unleaded gasoline.
  - B. methyl ethyl ketone.
  - C. organic silicone.
  - D. kerosene.
  
7. When selecting a proper patching device, choose one that is compatible with the material you are attempting to control, and ensure it is a minimum of \_\_\_\_\_ times larger than the estimated opening.
  - A. 1.5
  - B. 2
  - C. 1.75
  - D. 2.5

8. All of the following are required on a pipeline marker except:
- A. product.
  - B. product separator material.
  - C. owner / operator.
  - D. emergency telephone number.
9. Where would you find valves on a one-ton container?
- A. end
  - B. top
  - C. bottom
  - D. middle
10. \_\_\_\_\_ refers to the process of moving liquids, gases, or solids, either manually, by pump, or pressure transfer, from a leaking or damaged container.
- A. Mitigation
  - B. Containment
  - C. Confinement
  - D. Product transfer
11. A reading of "0" on any direct reading sampling device should be reported as:
- A. zero reading.
  - B. clean-area response.
  - C. batteries need to be checked.
  - D. no instrument response.
12. Which of the following would you **not** expect in a one-ton container?
- A. Chlorine
  - B. Oxygen
  - C. Sulfur dioxide
  - D. Phosgene
13. T F Vent and burn is the last option at a HAZMAT scene.
14. The amount of one substance mixed or dissolved in a specified amount of a second substance, usually measured in percentage, is known as the:
- A. concentration.
  - B. miscible.
  - C. compound.
  - D. mixture.
15. The appropriate device to be used in detecting nerve agents is a(n):
- A. M8 detection paper.
  - B. mercury detector.
  - C. fluoroscope.
  - D. both A and B are correct
16. The individual responsible for establishing and managing the site plan, developing an organizational structure, and allocating resources best describes the:
- A. Safety Officer.
  - B. Incident Commander.
  - C. Operations Officer.
  - D. Decontamination Officer.

17. The process in which a leaking compressed gas cylinder of chlorine is placed inside another cylinder device to control a leak is known as:
- packing.
  - vacuuming.
  - patching.
  - overpacking.
18. Which of the following exposure values could be repeated during an 8-hour work day a maximum of four times daily for 15 minutes with a 60-minute rest period between exposures?
- IDLH
  - TLV-TWA
  - TLV-STEL
  - TLV-C
19. The illustration and description below would be identified as a(n):



**Description:** Service pressures range from 100 to 500 psi.

- IMO Type 1.
  - IMO Type 2.
  - IMO Type 5.
  - IMO Type 7.
20. Which of the following products will likely be carried in a type MC 331 tank trailers?
- anhydrous ammonia
  - propane
  - gasoline
  - both A and B are correct
21. When using air purifying respirators, which of the following is not an operational component that should be considered prior to use?
- The supplied air line cannot exceed 300 feet.
  - The appropriate cartridge/filter is selected prior to use.
  - The concentration of the chemical is known.
  - Ambient air must contain at least 19.5% oxygen.

22. Glass devices filled with a reagent, designed to measure specific concentrations of products by producing a measurable stain **best** describes:
- A. colorimetric tubes.
  - B. combustible gas indicators.
  - C. gas chromatography.
  - D. photoionization detectors.
23. A tank car has the specification DOT 112 T 400 W. What does the T stand for?
- A. Thermal protection system
  - B. Thermal & insulation protection systems
  - C. Thermal protection system and a head shield
  - D. Head shield and shelf couplers
24. A recon team is sent to observe a tank truck that has rolled over. The team reports that the vehicle is an MC 312. The container most probably contains a:
- A. flammable liquid.
  - B. corrosive liquid.
  - C. poison gas.
  - D. flammable solid.
25. There is no assurance that once decontamination of chemical protective clothing is complete, \_\_\_\_\_ has ceased.
- A. chemical metabolism
  - B. abrasion
  - C. permeation
  - D. penetration