

Hazmat Awareness Study Guide – Answer Key

Chapter 1: Introduction to Hazardous Materials

1. C) Electrical
2. C) Inhalation
3. B) Contamination
4. C) Isolating the area and denying entry
5. B) Isolate the area and keep bystanders away
6. B) Cancer from asbestos exposure
7. D) Reflection
8. B) Mechanisms of harm
9. B) OSHA
10. C) Exposure means the material has entered your body
11. A) Recognize hazardous materials
12. B) Acute is short-term, chronic is long-term
13. A) Fear of the unknown
14. B) Analyze the incident
15. B) Analyze the scene for hazmat clues and stay safe
16. D) Perform leak control
17. B) Hazardous materials can be difficult to detect
18. C) Contamination is external, exposure is internal
19. A) Acute effects appear quickly, chronic effects take time
20. C) Isolate the area, deny entry, and notify command

Chapter 2: Recognize and Identify Hazmat

21. C) Sight
22. C) Sensory clues (victim symptoms)

- 23. B) Pressurized
- 24. B) Product, operator, emergency phone number
- 25. D) Vehicle color
- 26. B) They help responders identify hazards before an incident
- 27. B) Spherical containers are usually pressurized
- 28. C) They are required for most hazardous materials in transport
- 29. B) Markings provide additional information about the shipment
- 30. B) Use the ERG yellow section to look up 1017
- 31. D) Combustible gas
- 32. B) It lists materials by name
- 33. B) It lists materials by UN number
- 34. A) It provides response guides for specific materials
- 35. A) It provides isolation and protective action distances
- 36. B) They provide the product, operator, and emergency phone number
- 37. A) Labels are used on packages, placards on vehicles
- 38. C) Bulk packaging is used for large quantities
- 39. C) Pressurized containers have rounded ends
- 40. B) Use the ERG yellow section to look up 1203
- 41. A) Hazard class indicates the type of hazard, packing group indicates the degree of danger
- 42. A) Placards are used on vehicles, labels on packages
- 43. A) Shipping papers are used in transport, SDSs are used at fixed facilities
- 44. A) Hazard class is broader, division is more specific
- 45. B) Isolate the area and keep bystanders away
- 46. B) UN number is a 4-digit identifier, hazard class is a category of hazard
- 47. A) Hazard class is a category of hazard, guide number is a response guide

- 48. A) Hazard class is a category, hazard label is a visual indicator
 - 49. A) Hazard class is a category, hazard symbol is a visual indicator
 - 50. B) Isolate the area and keep bystanders away
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Chapter 3: Initiate Protective Actions

- 51. B) Inside cover of the ERG
- 52. B) The material is a toxic inhalation hazard (TIH)
- 53. A) 30 meters (100 feet)
- 54. C) Never; they should isolate and notify
- 55. B) Recognize, Isolate, Protect, Notify
- 56. D) Plugging a leak
- 57. C) Chemical, location, size, injuries, and conditions
- 58. C) Notification should be made as soon as possible
- 59. B) They can be expanded or reduced as needed
- 60. B) They are greater at night due to less atmospheric mixing
- 61. B) It is used for toxic inhalation hazards and water-reactive materials
- 62. B) They may help establish and maintain isolation perimeters
- 63. B) Isolate the area and keep bystanders away
- 64. B) Use ERG Guide 111 for unidentified cargo
- 65. B) Use Guide 111
- 66. B) Notify law enforcement and protect the scene
- 67. B) Isolation means keeping people out, evacuation means moving them away
- 68. B) It is used when evacuation is not possible or is more dangerous
- 69. B) It provides response guides for groups of materials
- 70. B) Notify proper authorities and provide information
- 71. B) Isolate the area and keep bystanders away

- 72. B) Isolate the area, deny entry, and notify command
 - 73. C) Hot zone is the area of contamination, warm zone is for decontamination and support
 - 74. C) Awareness Level personnel should use PPE appropriate for their training and not enter contaminated areas
 - 75. B) Isolate the area and keep bystanders away
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ERG Practice Scenarios

- 1. Guide 115; 30 meters (100 feet) in all directions
- 2. Table 1 (Initial Isolation and Protective Action Distances, green section)
- 3. Use the blue section to find “Chlorine,” note the guide number, then go to the orange section
- 4. Use the “night” column in Table 1; distances are generally greater at night
- 5. Guide 111 (Mixed Load/Unidentified Cargo)
- 6. Guide 128; 50 meters (150 feet) for a small spill
- 7. Chlorine; Guide 124
- 8. Methyl Ethyl Ketone; Guide 127
- 9. Orange section (Response Guides)
- 10. Oxygen; Guide 122
- 11. It is a toxic inhalation hazard; consult the green section for protective action distances
- 12. Gas Oil or Diesel Fuel; Guide 128
- 13. Guide 111 (Mixed Load/Unidentified Cargo)
- 14. Flammable Liquid, N.O.S.; Guide 128
- 15. Carbon Dioxide; Guide 120
- 16. “P” indicates polymerization hazard—follow additional ERG instructions

17. Use the blue section to find "Sulfuric acid," note the guide number, then go to the orange section
18. Ammonia; Guide 125
19. Acetone; Guide 127
20. Carbon Dioxide, Refrigerated Liquid; Guide 120
21. Butane; Guide 115
22. Ethanol; Guide 127
23. Hydrogen Sulfide; Guide 117
24. Hydrogen; Guide 115
25. Use the blue section to find "Ammonia, anhydrous," note the guide number, then go to the orange section