

Fire & Explosion Hazard Management – Quiz

1. What are the three components of the fire triangle?

- a) Water, Fire, Air
- b) Fire, Air, Wood
- c) Air, Fuel, Heat
- d) Heat, Air, H₂S

2. List 5 examples of Fuel or Hydrocarbon Sources:

3. The Five Physical States of Flammable Substances are Gases, Liquids, Chemicals, Solids and Vapours.

TRUE

FALSE

4. The Four main flammable gases found in the oil industry are Methane, Ethane, Butane and Helium.

TRUE

FALSE

5. Flammable Liquids may cause a transient fire hazard.

TRUE

FALSE

6. What are the three properties of hydrocarbon gases that will not allow humans to detect them?

7. Solids and Liquids do not burn in their original state! It is the _____ from a solid or liquid that burns.

8. Where can you find the information on the flammability of a chemical hydrocarbon?

9. The LEL (Lower Explosive Limit) is the _____ amount of fuel needed in air to burn. If there is too little fuel, the mixture is considered lean and will not burn.

10. The UEL (Upper Explosive Limit) is the maximum amount of fuel needed in air to burn. If there is too much fuel the mixture is considered _____ and will not burn.

11. List three locations where flammable substances may be found.

12. The target range for work when flammable gases or vapours are present should be:

- a) 20-50%
- b) 40-60%
- c) 0-20%
- d) 80-90%

13. In addition to the fire and explosion hazards associated with flammable substances, many of the substances have serious health hazards. List 2.

14. The three general methods of controlling hazards at a workplace are:

- a) Engineering, PPE, Controls
- b) PPE, Administrative, Engineering
- c) Inspection, Engineering, Maintenance
- d) Controls, PPE, Administrative

15. The GX-2009 is a _____ monitor.

- a) Two-head
- b) Three-Head
- c) Six-Head
- d) None of the above

16. The GX-2009 detects the presence of:

- a) Combustible Gas, H₂S, Oxygen & Carbon Monoxide
- b) H₂S, Oxygen, Methane & Helium
- c) Oxygen, Butane & Ethane
- d) None of the above

17. Where is the Cal Station located?

18. When should a bump test be performed?

19. In the field, you should sample the air:

- a) Within 30mm of the ground
- b) At ventilation exhausts
- c) Waist high
- d) All of the above

20. What do you do if your personal gas detection monitor alarm fails a bump test or calibration?
