Pre Knowledge Survey

1. Which of the following is not an element needed for a grain dust explosion:
   a. Oxygen
   b. Saturation
   c. Ignition Source
   d. Dispersion
   e. Confinement

2. T/F Pressures from an explosion with corn dust can be greater than 100 psig.

3. Good housekeeping includes:
   a. Vacuuming with proper equipment
   b. Paying attention to “hidden areas”
   c. Training all employees
   d. Maintaining dust aspiration systems
   e. All of the above

4. T/F Deflagration isolation is an option for dust explosion protection.

5. Which of the following are ways to reduce grain dust during unloading:
   a. Use cyclones, fabric filters, baffles, and deadboxes
   b. There is no good way to reduce dust during unloading
   c. A closed receiving area so the wind can’t disturb the dust
   d. Unload the grain slowly

6. T/F The recommended minimum spout slope for free flowing ingredients is 30 degrees.

7. Safety precautions for bucket elevators include:
   a. Locating the bucket elevator inside the main structure
   b. Dust tight with no venting to prohibit escape of dust
   c. Belt speed, alignment and bearing temperature sensors
   d. Explosion venting secured tightly to the leg

8. Suppression systems have to be inspected at minimum every:
   a. Month
   b. 2 months
   c. 3 months
   d. 12 months

9. T/F Chemical isolation systems do not trigger with pressure.

10. Explosion Suppression systems can suppress an explosion within:
    a. 20 milliseconds
    b. 40 milliseconds
    c. 80 milliseconds
    d. 120 milliseconds

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