Pre Knowledge Survey Key

- 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/<mark>F</mark> 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
 - <mark>c. 3 months</mark>
 - d. 12 months
- 9. T/<mark>F</mark> Chemical isolation systems do not trigger with pressure.
- 10. Explosion Suppression systems can suppress an explosion within:
 - a. 20 seconds
 - b. 40 seconds
 - c. 80 seconds
 - d. 120 seconds

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