



# **EXPLOSIONS / SAFETY TRAINING**

**Introduction:** The purpose of this talk is to discuss the safe handling and storage of substances that can explode. An explosion is a rapid expansion of gases. Sometimes fire or shock waves accompany the explosion. To prevent explosions, you need to become familiar with the substances that exist in your workplace and that may exploit. You should NEVER smoke around flammable substances.

**The United States DOT office has grouped explosives into three categories:**

1. Class A - The most dangerous include dynamite and nitroglycerin.
2. Class B - Hazardous, includes propellants and photographic flash powder.
3. Class C - The least dangerous, include certain manufactured articles that they contain some of Classes A and B, and sometimes fireworks.

**Chemical safety tips:**

- ✓ Read the labels to find out if the substance is explosive.
- ✓ Read the MSDS for information on specific explosion hazards, such as flash point, flammability limits, and incompatible substances.
- ✓ Dispose of expired chemicals in accordance with company policies and with the applicable regulations.
- ✓ Be alert to excessive heat build-up.
- ✓ Do not expose potentially explosive material to heat or air when transferring to new containers.
- ✓ Keep flammable substances away from heat sources.
- ✓ Do not dispose of flammable substances on the floor or down the drain.
- ✓ Use suitable containers.
- ✓ Store flammable substances in clean, dry, well-ventilated areas.
- ✓ Use the oldest chemicals first.
- ✓ Keep emergency kits available near product areas chemicals.

**What to do in a Blast:**

- Know where firefighting equipment is kept and how to use it.
- Leave the area quickly, following evacuation procedures.
- If possible, close doors and windows as you pass by to contain the problem.
- Stay upwind of the source of the problem.

**Conclusion:** Many substances other than dynamite explode. Always check the label and MSDS for get additional information. They can warn you about dangerous components of substances you are working with. Prevent Explosions Using Sense common and following correct safety procedures.

**Other Possible Explosion Hazards:**

- ✓ Machinery with poor maintenance.
- ✓ Mixing or storing incompatible substances.
- ✓ Self-opening leak valves.
- ✓ Poor ventilation.
- ✓ Dust in grain silos or similar areas.
- ✓ Static electricity.
- ✓ Friction between machinery and tools or cutting and welding equipment that produces sparks.