

## 5-MINUTE SAFETY TALK Brought to You By OSHA Pros

# Irreconcilable Differences

## *Storing Incompatible Chemicals*

When storing dangerous chemicals in the workplace it is important to know about the hazards of chemicals that are volatile when exposed to the others. The types of chemicals listed below are incompatible with other industrial chemicals.

### **Oxidizers and Flammables**

Fire requires oxygen to continue burning, which is why many people blow on a flame to stoke it and why suffocating the fire will put an end to it. For this reason, oxidizers, chemicals that generate hefty amounts of oxygen at once, are a top priority for keeping separate from volatile chemicals. Inorganic oxidizers are the most frequently utilized. They don't burn on their own, but instead contribute oxygen to a flame. These are extremely hazardous around organic matter. Oxidizers that are organic strengthen the flame and are combustible when paired with high temperatures, electricity, or friction. Containment areas need to always keep oxidizers of all kinds labelled, listing the level of danger. Always keep

oxidizers removed entirely from the vicinity of all things combustible. If large amounts are being stored keep it in a fire-protected area. Flammable chemicals and resources should be stored in a room with good ventilation. Receptacles should always be checked for fire resistance and be made to stop static electricity from igniting.

Examples of oxidizers are benzoyl peroxide, many acids (concentrated nitric, concentrated sulphuric), plus concentrated hydrogen peroxide.

### **Acids and Bases**

In chemistry, bases and acids are opposite and when combined, can react adversely, sometimes causing combustion and poisonous gas leaks. Potently caustic, they can affect many kinds of materials. If exposed to flammable substances, several acids can cause a fire. Lye and other bases can generate substantial amounts of heat when mixed with water. Bases such as lye produce intense heat when in contact with water. Make sure there is no confusion as to what is acid and what is base when labelling containers. Always keep the two separate.

### **Be Informed**

When choosing which chemicals to store and where, give heed to your business' chemical containment system or observe warnings and MSDS storage-compatibility information. Never be assumptive and store a chemical with others simply based upon it not immediately seeming like it falls into the above-mentioned categories. Only when you have followed all instructions on storing a specific chemical can you be assured of safety.



Company Name: \_\_\_\_\_

Date of Meeting: \_\_\_\_\_ Instructor: \_\_\_\_\_

Topic: \_\_\_\_\_

**Attending Employees**

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