Oily rags left in closed containers can present a serious fire risk. Many people don't believe oily rags left undisturbed could ignite all by themselves without the presence of an ignition source, such as a spark or lighted match. Oily rags stored in a waste can or on a pile on the floor, however, CAN ignite, even without any help from a separate ignition source. This is known as spontaneous combustion. According to the National Fire Protection Association (NFPA), an estimated 14,070 fires are started each year by spontaneous combustion.

Spontaneous combustion occurs when a combustible material is heated to its ignition temperature by a chemical reaction involving the oxygen in the air around the material. This heating process is known as self-heating. In the case of oily rags, it's a relatively simple process of oil oxidizing and generating heat. If not dissipated, the heat will build up until combustion occurs. Generally, this can happen when the materials are left in piles, which provide a source of insulation, trapping the heat that's generated.





A number of materials are moderately or highly prone to self-heating and spontaneous combustion. Those materials can include rags, cotton, or other fibrous combustible material that come into contact with oil-based paint; rags that are damp with any one of a number of different types of oils, including vegetable oils; and oily uniforms or work clothes.

To reduce the risk of spontaneous combustion, use these techniques:

- Dispose of items in a metal safety can with a self-closing lid specifically manufactured to hold oily waste.
- Place these safety containers at key locations throughout your facility (away from ignition sources) and remove from the site as soon as possible.
- All individual waste containers should be emptied into a larger drum with a lid that securely closes at the end of each day. The drum should be located outside, preferably away from the building. Keep your drums and hazardous waste storage containers securely closed and locked.
- Maintain proper fire extinguishing equipment and smoke detectors, and be sure you have a housekeeping program in place to ensure rags are disposed of properly each day.

Oil-soaked rags should never be disposed of in trash compactors, trash dumpsters, or ordinary trash cans. When removing rags from your property, consider whether there's a local hazardous waste disposal center nearby that will accept them or a company you may contract with to have them removed.

