



The Dangers of Oily Rags

Oily rags left in a closed container can become a safety nightmare. Many people do not believe it can happen. For no apparent reason, fire erupts— as the materials have had time to react. It is called spontaneous ignition, and prevention is everyone’s responsibility.

Spontaneous ignition occurs when a combustible object is heated to its ignition temperature by a chemical reaction involving the oxygen in the air around us. This “oxidation” process creates heat that, if not dissipated, will build up until ignition occurs. Generally, this can happen when the materials are left in piles and the heat being generated in the pile cannot be released into the air.

A number of materials are moderately or highly subject to spontaneous heating and subsequent ignition. Some of those you may find in your work area include oily rags, cotton, or other fibrous combustible material; rags that are damp with any one of a number of different types of oils, including vegetable oils; oily uniforms or work clothes.

The possibility of spontaneous ignition is great if the surrounding air is also warm and dry. The added heat, say from nearby machinery or a non-insulated steam line, can either pre-heat the material, which in turn sets off the reaction, or can accelerate ignition by adding even more heat to the combustible.

Dispose of oily rags and other combustible material in covered metal containers (the cover keeps oxygen at low levels) and promptly discard.

Proper housekeeping is the key to preventing fires. Keep work areas free of debris and properly store combustibles in covered containers away from buildings and facilities vulnerable to fire. Be sure the lids of containers remain in place – they are there for a purpose. Fire not only damages property, it threatens lives.



