Safe Storage And Disposal Of Oil Or Solvent-soaked Rags Stats and Facts



FACTS

- Many materials are prone to spontaneous ignition such as linseed oil, oil-based paints and stains, varnishes and polyurethane, and paint thinners.
- Oil or solvent soaked rags are one of the most common causes of garage fires.
- The main products that pose a risk of combustion are typically oil-based paints, oil-based stains, teak oils, linseed oils, varnishes, polyurethane paints, and paint thinners etc.
- When a rag or cloth is soaked in oil-soaked product, an exothermic chemical reaction occurs producing energy in the form of heat. Over a small space of time the temperature will continue to rise and if this heat has nowhere to escape, the rag will combust and bursts into flames.
- The most common type of Spontaneous Combustion fires are those caused by improperly disposing of oil and stain-soaked rags. Examples of these products are oil-based paints, stains, teak, linseed oils, varnishes, polyurethane, paint thinners, etc. Spontaneous combustion of oily rags occurs when rag or cloth is slowly heated to its ignition point through oxidation. A substance will begin to release heat as it oxidizes. If this heat has no way to escape, like in a pile, the temperature will raise to a level high enough to ignite the oil and ignite the rag or cloth. The fire from this can spread quickly to other combustibles and cause great damage.

STATS

- Exposure to harmful substances or environments was previously the 6th ranked cause of workplace fatalities in the United States, according to the Occupational Safety and Health Administration (OSHA). These harmful substances or environments can include toxic chemicals, fumes, gases, and radiation, as well as extreme temperatures, noise, and vibrations. Exposure to these hazards can lead to a range of health problems, including respiratory diseases, cancer, hearing loss, and neurological damage. It is important for employers to identify and assess these risks in the workplace and take steps to control or eliminate them to protect workers from harm. In 2020, exposure to harmful substances or environments resulted in 424,360 nonfatal injuries and illnesses involving days away from work, and 672 fatalities. More than half of these deaths (388) involved nonmedical use of drugs or alcohol resulting in unintentional overdoses.

- The results show that 74% of accidents occurred in petroleum refineries, oil terminals or storage.
- 33 % of accidents in storage tanks in the Oil & Gas sector.
- 242 accidents of storage tanks that occurred in industrial facilities-
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