

Risk Control

Oily Rags Safe Handling & Storage

Oily rags are commonly used in various settings, from industrial environments to small workshops and studios. Whether soaked in oils, solvents, paints, or other combustible substances, improper handling and storage of these rags can lead to a significant fire risk due to spontaneous combustion. It must be noted, there should be no combustible/flammable free liquids in the container with these rags. Oily rags are typically considered a universal waste, and therefore they are subject to less stringent government guidelines as to how to safely dispose of them. The presence of a free liquid makes them a hazardous waste and treated as used oil which means the Environmental Protection Agency (EPA) regulates disposal. This guide provides recommendations on how to safely handle oily rags and comply with regulations, thereby decreasing the risk of fire.

The Fire Risk of Oily Rags

Understanding Spontaneous Combustion

Oily rags can undergo a chemical reaction known as oxidation when exposed to air. This reaction generates heat, which can accumulate in a confined space, such as a pile of rags, leading to spontaneous combustion. This risk is present regardless of whether the rags are used in large industrial settings or small workshops.

Potential Consequences

Fires caused by spontaneous combustion of oily rags can result in extensive damage to property, loss of equipment, and even injuries. Such fires can spread quickly, particularly if other combustible materials are nearby.

Safe Disposal and Storage Solutions

1. Use Approved Containers for Oily Rags:

Underwriters Laboratories (UL)-Listed Safety Cans:

- Store oily rags in UL-listed safety cans designed to limit oxygen exposure, reducing the risk of spontaneous ignition.
- These containers should be made of non-combustible materials like metal and equipped with a self-closing lid to contain potential fires.

Features of Approved Containers:

Self-Closing Lid: Prevents air from entering the container, reducing the chance of combustion.

Durability: Constructed from materials that can withstand high temperatures.

2. Immediate Disposal and Handling:

Prompt Disposal:

- Immediately place oily rags into an approved container after use to prevent them from piling up and creating a fire hazard.
- Avoid leaving rags on surfaces, in open bins, or in areas where heat sources are present.

Regular Emptying:

Regularly empty and clean approved waste containers to prevent the accumulation of oily rags, reducing the
overall fire risk.

Storage Guidelines for Various Work Environments

1. Proper Placement of Waste Containers:

Strategic Location:

- Place waste containers in well-ventilated areas away from heat sources such as machinery, electrical equipment, or open flames.
- Ensure containers are placed on non-combustible surfaces to further reduce fire risks.

Accessibility:

 Ensure that containers are easily accessible for immediate disposal of oily rags but are not obstructing pathways or exit routes.

2. Workshop and Studio Safety:

Ventilation:

Ensure proper ventilation in workshops or studios to disperse any fumes from oily rags, reducing the risk of ignition.

Storage Location:

Store containers away from other flammable materials, such as wood shavings, paper, or fabrics.

Compliance with Safety Standards

1. Occupational Safety and Health Administration (OSHA) Regulations:

29 CFR 1910.106 - Flammable Liquids:

- OSHA requires that containers used for storing oil-soaked rags must be made of metal and equipped with a selfclosing lid to prevent spontaneous combustion.
- Compliance with these regulations is essential for both safety and legal purposes.

2. National Fire Protection Association (NFPA) Standards:

NFPA 30 - Flammable and Combustible Liquids Code:

- NFPA 30 mandates the use of fire-resistant waste cans for storing oily rags to prevent fires in various environments.
- Containers should be made of materials that do not support combustion and must be designed to limit oxygen exposure.

Summary of Best Practices

Proper handling and storage of oily rags are essential to prevent spontaneous combustion and fires. Train individuals on the fire risks associated with oily rags and correct disposal methods, and conduct regular safety briefings. Implement an emergency response plan, including fire drills and ensuring accessible extinguishers. Use UL-listed safety cans, which cost between \$30 and \$100, as a preventative measure to avoid fire-related damages. Best practices include using approved containers with self-closing lids, promptly disposing of rags, and storing containers in well-ventilated areas away from flammable materials. Adhering to these guidelines significantly reduces the fire risk, creating a safer environment in both professional and personal settings. For more information, refer to OSHA.gov and NFPA.org.

