Jersey Harbour Authority
Maritime House, St Helier, Jersey, JE1 1HB

Safety Bulletin 01 of 2025

Spontaneous combustion in the anchor Locker

We would like to inform about a recent safety incident involving a pleasure yacht in St Helier, Jersey. The crew had recently performed a major clean of the anchor locker and used oil/white-spirit cleaning product for the task. Subsequently in this exercise, a small quantity of used rags contaminated with the cleaning product were stored in a plastic airtight box and stored on a high shelf close to the underside of the foredeck. The rags smouldered and melted the lid of the plastic box, likely due to the exothermic evaporation of the oil-based product. The fire self-extinguished naturally and was only discovered after the event.

It is important to note that while the yacht was equipped with fire detectors, there was no detector in the anchor locker, and there is no requirement to have a detector in this area for this particular vessel. This incident serves as a reminder of the potential fire risks associated with improper storage of oily rags and the importance of taking extra precautions in areas where heat buildup can occur.

The incident resulted in smoke damage to the inside of the anchor locker and other minor repairs required.

Summary

- A fire incident occurred on a yacht due to improper storage of oily rags in a plastic box.
- The rags smouldered from heat buildup, likely due to exothermic evaporation causing the box lid to melt.
- The incident caused smoke damage and other minor repairs required, highlighting fire risks of improper rag storage.

Similar incidents

- Fire aboard yacht Pegasus
- Jersey Fire & Rescue Service have had eight occurrences in the last five years - The majority of fires have been caused when towels or chefs clothing/tea towels have been laundered then placed in the tumble dryer.

Safety lesson: Preventing spontaneous combustion of oily rags

Understanding the risk

Spontaneous combustion of oily rags occurs when rags or cloths are slowly heated to their ignition point through oxidation. As a substance oxidises, it releases heat. If this heat cannot escape, such as when rags are piled together, the temperature can rise to a level high enough to ignite the oil and the rag or cloth. This is a common occurrence, and the Jersey Fire & Rescue Service have stated that they attended numerous fires caused by this phenomenon.

Vigilance during vessel preparation

As many boat owners prepare their vessels for the upcoming summer season, it is crucial to be particularly vigilant about the storage and disposal of oily or used cleaning rags. These materials can pose a significant risk of spontaneous combustion if not handled properly.

Safe disposal practices

To reduce this risk, follow these safe disposal practices:

1. **Dispose of rags safely**: Always dispose of rags in accordance with the product's safety material data sheets as soon as possible.

2. **Consider use of fire-resistant containers**: Place oily rags in a closed, fire-resistant container pending disposal.

3. **Ensure proper ventilation**: Store the container in a well-ventilated area, away from other flammable materials.

4. **Educate crew members**: Ensure all crew members are properly educated on the potential hazards and the correct procedures for handling and disposing of oily rags.

Expert advice

The UK P&I Club advises that oil-soaked rags, known to "self-heat" and combust spontaneously, should be kept in a steel container with a lid until they can be properly disposed of.

By following these guidelines, you can significantly reduce the risk of fire and ensure a safer environment for everyone onboard.