BCF Guidance on Spontaneous Combustion for the general public

What it is?
Spontaneous combustion is the ability of certain materials to ignite without the presence of any ignition source such as a flame, spark or heat. This could lead to a major fire and its inherent consequences.

What types of material are likely to spontaneously combust?
The most common materials that can undergo spontaneous combustion are linseed oil-based products, alkyds (both solvent- and water-borne), and coatings containing drying oils.

Where could this occur?
The usual places for spontaneous combustion to occur are on rags, paint filters, masking tape, paint scrapings and other materials which have been soaked with the product or have a build-up of product on them. These, if left exposed to the air and any heat generated cannot dissipate, can spontaneously combust through the oxidation (auto-oxidation) reaction of the product generating sufficient heat to exceed the ignition temperature of the rags, filters or other combustible materials.

How do I prevent this?
Materials such as cleaning rags, paper wipes and protective clothing which are contaminated with products containing more than 10% air drying oils or high oil content binders may spontaneously self-ignite some hours later. BCF members thus recommend:

*To avoid the risk of fires, **all** contaminated materials should be removed from indoor areas after use and stored outdoors either:*

- *In metal containers with tight-fitting self-closing lids; or*
- *Laid out flat in a well-ventilated area in a single layer to dry; or*
- *Placed in a metal container with a tight-fitting lid, and soaked in water; or*
- *Washed out well with warm soapy water (≥ 40°C) before disposal.*

It is additionally recommended that **heavily soiled rags and clothing** should be submerged in water inside metal containers with tight-fitting lids.

How should I dispose of drying oils and contaminated rags?
Do NOT dispose of contaminated rags in regular waste containers. Linseed oil and rags contaminated with linseed oil should not be disposed of in general household waste due to environmental and fire hazards. Check with your local Household Waste Recycling Centre as policies on accepting specific hazardous materials vary by location.

Can I re-use the rags?
Cleaned rags that have been dried and washed out with warm soapy water *(≥ 40°C)* may be re-used.

Further information
https://www.esfrs.org/the-fire-hazards-of-linseed-oil

The information in this note is believed at the time of writing to be true and accurate. It is a summary and should be considered in conjunction with the original legislation. All liability for loss or damage however arising from use of the information provided in this guidance (whether directly or indirectly) is hereby excluded to the fullest extent permitted by law. © BCF 2026