Improper use of a drying oven can potentially lead to a fire. Some basic steps to take to avoid this situation:

**Prior to Use:**

- Refer to the manufacturer's instruction manual to determine operating limitations of the oven.
- Post written instructions on how to use the drying oven.
- Ensure the equipment is properly maintained, the thermostat is calibrated, and report any faults to your supervisor immediately so they can be corrected.
- Know your sample’s combustible/flammable temperature limit and do not exceed this temperature.
- Check the thermostat regularly to ensure it has an accurate calibration

**Loading the Oven:**

- Start the drying oven early in the day to ensure it has reached temperature and can be checked for stability before you leave work for the day.
- Do not overfill the oven. Do not “solid-pile” your sample; Spread out your sample and leave space for airflow.
- If the oven has elements in the bottom of the oven drying area, ensure there is no way for the items being dried to fall through the shelf directly onto the elements below.
- Use heat-resistant gloves when working with a hot oven.
- If the samples need to be dried over a number of days, start early in the week so it is not left running over the weekend leaving it unattended for extended periods of time.

**In Case of a Sample Overheating**

- If the sample contents within the oven start to smolder, Do Not Open The Oven Door!
- If it is safe to do so, turn off the oven, unplug the power cord, and monitor for flare-up.
- Call 911 if a fire develops.