Safety Instruction

Drying Ovens

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 and ensure all employees are trained on its set-up, limitations, and precautions.
- Ensure the equipment is properly maintained, the thermostat is calibrated, and report any faults to your supervisor immediately so they can be corrected. Never use a mercury thermometer when ensuring the thermostat reading is correct.
- Know your sample's combustible/flammable temperature limit and do not exceed this temperature.
- Never put flammable or combustible chemicals, or samples treated with flammable chemicals, in the oven.
- Set the high temperature shut-off set point to a temperature that does not meet or exceed your material's combustion point.
- If there is a possibility of generating fumes, the oven must be connected to an approved ventilation system.
- Ensure there are a few inches of clearance around the drying oven, do not store combustibles on or directly adjacent to it.

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.
- Ensure that there is no way for the items being dried to fall through the shelf directly onto the elements below.
- 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.
- Avoid use of flammable plastics and paper in the ovens due to the fire hazard potential.
- Use the Drying Oven User Log in order to track temperatures, times and users

Removing Items from the Oven

- Use heat-resistant gloves when working with a hot oven.
- Open hot ovens with care, standing to one side when opening the door to avoid high temperature exposures.

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.
- Do not operate the drying oven again until repairs are made.

Maximum Temperature & Time (MUST BE POSTED ON ALL DRYING OVENS)

When using the drying over	n DO NOT exceed a maximum
temperature of	_C°/ F° (circle one) and/or a
maximum usage time of	minutes/hours
(circle one).	

Contact EHS: safety@oregonstate.edu oregonstate.edu/ehs/ 541 • 737 • 2273

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Drying Oven User Log

Name	Date & Time IN	Date & Time OUT	Temperature