



DEPARTMENT OF
**ENVIRONMENTAL
HEALTH AND SAFETY**

EHS BULLETIN

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PERCHLORIC ACID

Perchloric acid is a strong mineral acid used for the digestion of organic material. This clear, colorless solution poses numerous hazards when used in laboratory research. For example, perchloric acid can become an oxidizer and cause a fire or explosion when surrounded by organic acids.

TIPS REGARDING THE USE OF PERCHLORIC ACID:

- Heated perchloric acid should not be used in a normal chemical fume hood. This process requires a special perchloric acid fume hood with a washdown system.
- The use of perchloric acid should be kept to a minimum as a prudent practice due to the nature of the chemical.
- When this chemical is being utilized, it is imperative that large containers are elevated 2 inches off the base of the fume hood. Perchloric acid vapors can be fatal if inhaled; therefore, it is important to ensure there is adequate air flow in the fume hood.
- It is important to maintain Safety Data Sheet (SDS) in the laboratory where perchloric acid is being handled.
- Personal protective equipment (PPE) is of utmost importance when handling perchloric acid. The PPE should include the following:
 - Close-toed shoes, long sleeve shirt and long pants
 - Laboratory coats AND acid resistant aprons
 - Splash resist goggles as well as chemical resistant face shield
 - Double gloving with <70%: natural rubber, neoprene, PVC, nitrile, or Viton gloves
Alternatively, you may select <85% gauntlets of the above materials.

Storage of perchloric acid differs from other chemicals as it is highly incompatible with organic acids. This chemical should be stored in a metal acid/corrosives cabinet or in a perchloric acid fume hood.

Similarly, there are special considerations that should be known regarding the disposal of this chemical. These include:

- Perchloric acid waste CANNOT be combined with any other types of waste.
- Perchloric acid waste should be in its own secondary containment and labeled as "Perchloric Acid Waste".
- Perchloric acid should be stored in its original container.

For more information on perchloric acid, please see the link below:

[OSU Perchloric Acid Fact Sheet.](#)

For questions, please call EHS at (405) 744-7241 or email at ehs@okstate.edu.

TORNADO SAFETY

Tornadoes can occur with little or no warning. Taking early precautions, such as developing an emergency plan, learning the warning signs, and monitoring tornado watches and warnings, can help you stay safe if a tornado occurs in your area.

TORNADO WATCH

A tornado watch means that a tornado is possible. A tornado watch is issued when weather conditions favor the formation of tornadoes.

TORNADO WARNING

A tornado warning means that a tornado has been sighted or spotted by weather radar in your area. You should immediately take shelter during a tornado warning.

TORNADO SIGNS

- Dark or green-colored sky
- Large, low-lying clouds
- Large hail and strong winds
- Rotating funnel-shaped cloud.
- Loud roar that sounds like a freight train.

SEEKING SHELTER

- Although there is no completely safe place during a tornado, some locations are safer than others. Safe places include a storm cellar, a basement, or an inside room without windows on the lowest floor (such as a bathroom, closet, or center hallway).
- If you live in a mobile home, identify a nearby building you can get to quickly. Don't stay in a mobile home during a tornado. If you live in a tornado-prone area, encourage your mobile home community to build a tornado shelter.

TORNADO EMERGENCY PLAN

- Make sure everyone understands the tornado warning system in your area.
- Learn the emergency dismissal policy for your child's school.
- Plan for your pet. They are an important member of your family, so they need to be included in your family's emergency plan.

While our university is located in an area at higher risk for tornadoes, do not forget that they can still occur anywhere under the right circumstances. Remember these tips above to keep your friends and family safe. Having the app RaveGuarding on your phone is a great way to stay current on the campus weather status. For areas of refuge on OSU, please see [OSU Severe Weather Refuge Locations](#).

MONTHLY TRAINING OPPORTUNITIES

Respiratory Protection

1st Tuesday of every month at 8:30 a.m.
FM North Building, Room 101C
Registration: email ohsp@okstate.edu

Bloodborne Pathogen Training

2nd Tuesday of every month at 9 a.m. and 2 p.m.
EHS Conference Room, 003 UHS
Registration: email chemicalsafety@okstate.edu **Fire**

Safety w/Hands-On Extinguisher Training

2nd Friday of every month at 9 a.m.
EHS Conference Room, 003 UHS
Registration: email ohsp@okstate.edu

Monthly Employee Training

3rd Thursday of every month at 9:30 a.m.
EHS Conference Room, 003 UHS
Registration: email ohsp@okstate.edu

Laboratory Safety and Hazardous Waste Training

4th Tuesday of every month at 8:30 a.m.
EHS Conference Room, 003 UHS
Registration: email ohsp@okstate.edu

**For questions about general safety or tornado safety,
call EHS at (405) 744.7241 or email us at ehs@okstate.edu.**