

DEPARTMENT OF ENVIRONMENTAL HEALTH AND SAFETY

EHS BULLETIN

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HYDROFLUORIC ACID

Hydrofluoric acid (HF) is an inorganic acid often used to etch glass or dissolve rocks. Although HF is weak compared to most other mineral acids, exposure can cause serious health effects. The fluoride ions in HF have a high affinity for calcium in the human body, and

skin exposure could lead to hypocalcemia as well as necrosis of tissue due to its corrosivity.

HYDROFLUORIC ACID SAFETY PRECAUTIONS:

- Read all relevant safety data sheets (SDS).
- Conduct work in a chemical fume hood with signage stating "Danger, Hydrofluoric Acid in Use."
- Add Calgonate to your first aid kit for any skin exposures.
- Only work with HF during university working hours with others present.
- Wear the appropriate personal protective equipment (PPE), including
 - Laboratory coat
 - Acid resistant apron
 - Close-toed shoes
 - Long pants
 - Full-face shield in conjunction with chemical splash goggles
 - Gloves
 - For solutions less than or equal to 30% HF, nitrile exam gloves can be utilized. However, it is strongly recommended to double glove.
 - For more concentrated solutions, neoprene rubber gloves should be utilized.
- Store HF away from other chemicals in secondary containment.
- Limit access to HF to trained personnel only.
- Have an HF spill kit with dry magnesium sulfate, calcium carbonate, calcium hydroxide available, or purchase a commercial HF spill kit.

ANY EXPOSURE TO HF IS CONSIDERED A MEDICAL EMERGENCY, AND MEDICAL ATTENTION SHOULD BE SOUGHT IMMEDIATELY.

FIRST AID RECOMMENDATIONS INCLUDE:

- Skin exposure: Remove contaminated clothing and wash the area with copious amounts of water for 15 minutes. After washing, apply calcium gluconate first aid gel.
- Inhalation: Remove victim to clean air until emergency personnel arrives.
- Eye exposure: Immediately flush eyes for at least 15 minutes with copious amounts of water until emergency personnel arrive.

FOR ADDITIONAL INFORMATION, SEE THE LINKS BELOW:

- OSU EHS Hydrofluoric Acid Fact Sheet
- OSU EHS Corrosives Fact Sheet

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

CONSTRUCTION SAFETY REVIEWS

At Oklahoma State University, safety is always a top priority — especially when it comes to construction. The Environmental Health and Safety (EHS) team, in coordination with OSU's Construction and Contracting Services and Long-Range Facilities Planning, plays a critical role in ensuring that all construction activities meet rigorous safety standards through daily construction site safety reviews. Each review is guided by a detailed checklist designed to

evaluate a wide range of potential hazards and safety measures. These reviews help identify and correct unsafe practices, protect workers and the OSU community, and promote a culture of safety on campus.

WHAT THE CONSTRUCTION SAFETY REVIEWS COVER:

EHS construction safety reviews take a comprehensive look at safety conditions across various areas, including but not limited to aerial lifts, barricading, silica, cranes, excavation, hand and power tools, ladders, personal protective equipment, powered industrial trucks, scaffolding, and welding and cutting. All areas are evaluated to ensure compliance with federal and state regulations, ultimately protecting OSU, students, faculty, staff, and visitors.

WHY THE REVIEWS MATTER:

By proactively identifying hazards, EHS wants to prevent accidents before they happen. These reviews are not just about compliance with federal and state regulations, they are about building a

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

culture where safety is second nature. Construction on a university campus comes with unique challenges, but with regular construction safety reviews, EHS ensures projects move forward with the well-being of workers, students, faculty, and staff in mind. Not only do these site visits ensure a safer environment, they also provide better communication between all parties, helping to identify issues early, and contributing to higher quality products in the end.

For questions about our construction review process, please contact EHS at ehs@okstate.edu or 405-744-7241.