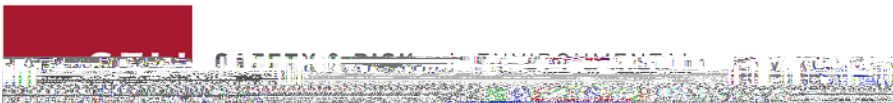


Chemical safety fact sheet: Perchloric acid

Perchloric acid (HClO_4) is a colourless, odourless liquid, and is a strong mineral acid with similar properties to other mineral acids: it is highly corrosive and causes severe burns on contact with tissue. Under some circumstances perchloric acid may act as an oxidizer and/or present explosion hazards.

Hazards

Perchloric acid is extremely corrosive, a powerful oxidizer when concentrated (70%). Improper



Emergency procedures

Ensure you know the location of the emergency eyewash, safety shower and chemical spill kit. Inform your supervisor and complete an incident report after any incident.

First aid response

Skin contact Remove contaminated clothing, rinse affected area with water for 15 min. Seek medical attention by calling 911 and Campus Security at 782-45008.

Eye contact Immediately flush eyes with water for 15 min. Seek medical attention at the Student Health Center.

Inhalation Move person to fresh air. Seek medical attention.

Spill response

Any spill can be hazardous if allowed to stand. Attend to spills promptly.

Do not use organic materials, such as paper towels, rags or Kimwipes as a spill cleanup. These materials can dry out and spontaneously ignite.

Alert others and clear the immediate area where the spill occurred.

Only attempt clean up if you have been trained, are equipped and feel comfortable to do so.

Retrieve the laboratory spill kit and additional PPE as necessary.

Neutralize with Spill-A, scoop up the neutralized waste into a heavy-duty plastic bag and thoroughly wet the material with water.

Use paper towel to wet wipe up the remaining neutralized residue.

All materials used in neutralization and spill cleanup should be placed into the plastic bag, the contents thoroughly wetted, the bag sealed and labeled. Neutralized perchloric acid spill cleanup.

Submit a request for waste pickup through the online system.

For spills that require assistance, evacuate all personnel from the laboratory, post a warning on the laboratory to restrict access and call Campus Security at 782-4500.

Reference

National Research Council (U.S.). (2011). *Practices in the laboratory: Handling and management of chemical hazards*. Washington, D.C: National Academies Press.