

# Naming Common Acids



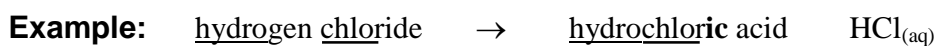
Acids have more than one possible definition. Some define an acid according to what it does and others define an acid by its composition. For now, all you need to remember is that an **acid** is a compound that releases hydrogen cations ( $\text{H}^+$ ) when dissolved in water (aqueous).



Common acids are formed from the **aqueous** (aq) solutions of binary compounds and fall into two basic categories of acids: binary acids and oxyacids (terinary).

## Binary Acids

Binary Acids are the aqueous (aq) solutions of binary compounds. Binary acids are named using the "hydro-" prefix, the **root of the other element**, the suffix "-ic" and the word acid.

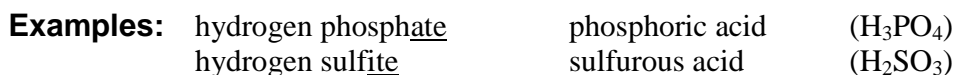


## Oxyacids

Sometimes called ternary acids, **oxyacids** are the aqueous solutions of compounds containing hydrogen, oxygen and a third element. These compounds usually produce a polyatomic ion when in aqueous solution, and the names for these acids formed are based on the polyatomic ions produced.

If the polyatomic ion ends in "**-ate**" use the root of the third element and **add "-ic"**

If the polyatomic ion ends in "**-ite**" use the root of the third element and **add "-ous"**



**PRACTICE**

**NAME** the following compounds as acids.

_____	HCl	_____	H <sub>2</sub> S
_____	H <sub>2</sub> Se	_____	HCN
_____	HI	_____	H <sub>2</sub> Te
_____	HSCN	_____	HF
_____	HNO <sub>3</sub>	_____	HC <sub>2</sub> H <sub>3</sub> O <sub>2</sub>
_____	H <sub>2</sub> SO <sub>4</sub>	_____	H <sub>3</sub> PO <sub>3</sub>
_____	H <sub>2</sub> CrO <sub>4</sub>	_____	HIO <sub>4</sub>
_____	HBrO <sub>3</sub>	_____	HClO
_____	H <sub>2</sub> C <sub>2</sub> O <sub>4</sub>	_____	HMnO <sub>4</sub>
_____	H <sub>2</sub> CO <sub>3</sub>	_____	HClO <sub>4</sub>
_____	HNO <sub>2</sub>	_____	H <sub>2</sub> SO <sub>3</sub>
_____	HBr	_____	HClO <sub>2</sub>
_____	H <sub>2</sub> SeO <sub>3</sub>	_____	HBrO <sub>4</sub>

**"Life is not a dress rehearsal every day is opening night." --Peter Daniels**